

Design capability in
Finnish governmental
organizations:
*perspectives of
design-minded civil
servants*

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Design capability in Finnish governmental
organizations: perspectives of design-minded
civil servants

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Design-led approaches (DLAs) promise to assist the public sector in providing better public value while saving costs and addressing complex problems. Governments in Finland and abroad have been increasingly applying DLAs in their work. This trend is demonstrated by the formation of communities of practice, such as *Julkis-muotoilijat* (design-minded civil servant community in English), which have formed around the utilization of DLAs in the government.

However, the application of DLAs in the governmental context is relatively recent and not well understood. As such, there is a need for further empirically grounded research in order to better understand which promises are kept by design approaches. The latter may be necessary in order to have a more realistic image of the current uses of DLAs. One of the objectives of the thesis was to first reflect on the perceived contributions as well as current and potential uses of DLAs in some public sector organizations. Second, this thesis set out to examine the perceived challenges to the application of design-led approaches. A better understanding of the challenges may enable reflection on the conditions in which DLAs may be applied to their full potential. In the area of applying DLAs in the public sector, Finland has been described as the forerunner and was chosen as the context of this research. To investigate these topics, design-minded civil servants (n=33) with a membership in the *Julkis-muotoilijat* community were surveyed through a qualitative and quantitative questionnaire. The results were interpreted using Malmberg's (2017) Design Capability Framework and its three dimensions, namely awareness of design, design resources, and structures enabling a design practice.

The results indicated that the application of design-led approaches varies greatly with a strong emphasis on digital service development. DLAs were especially seen to contribute to bringing user-centric views and also in building bridges and enabling greater collaboration between actors. The surveyed design-minded civil servants did recognize the value of DLAs as it applies to a strategic and policy level and enabling organizational transformation. However, among the respondents, these applications remain mostly aspirational and limited. The respondents also reported facing significant challenges in applying DLAs. The challenges ranged from simpler ones, such as having appropriate spaces to conduct design activities, to more demanding ones, such as cultural pushback. These survey results point to a need for a greater consideration of organizational conditions, such as structures enabling a design practice and awareness of design when introducing design capability into public sector organizations.

KEYWORDS: design capability, public sector, design-minded civil servants, design for government, community of practice

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1. The term *public sector* refers to the central and subnational government and its agencies (Wegrich, 2014). It can also refer to state-owned enterprises (Wegrich, 2014). The focus of this thesis is the former, whereby the terms *public sector* and *governmental organizations* are used interchangeably to refer to organizations and agencies at all levels of government, excluding state-owned enterprises.

INTRODUCTION

Increasingly, different levels of government, such as national, regional, and municipal, utilize design-led approaches (DLAs) in their work. Public sector¹ organizations are seeking to acquire design knowledge and an ability to utilize design approaches, such as service design, strategic design, and design for policy. They are increasingly setting up in-house design labs, hire professionally trained designers, and provide design-related training for civil servants as well as procure design services. While the way design approaches are positioned in relation to governing bodies and stakeholders varies broadly across organizations, the kind of issues they are called on to address seem similar. DLAs are argued to be introduced as a way to reduce costs in times of austerity and to address complex problems while creating better public value (e.g., Bailey J. & Lloyd, 2017). Further, Bason and Schneider (2014) claim that DLAs are utilized to address problems of varying scales, such as on policy or service level, and as a new approach for citizen engagement. Other researchers also discuss the role of DLAs in the context of organizational change and transformation (e.g., Bailey S. G., 2012; Junginger & Sangiorgi, 2009; Sangiorgi, 2011).

Design capability as an area of research first emerged as a response to the increased application of DLAs in the private sector setting and is now also examined in the context of the public sector. A growing number of reports (e.g., Koskinen & Thomson, 2012; McNabola et al., 2013), articles and dissertations (e.g., Lin J.-Y., 2014; Malmberg, 2017), and practice-based accounts (e.g., Bailey S. G., 2012; Kimbell, 2015) have in recent years been published, touching on the topic of design capability in the public sector. Finland specifically has been described as a forerunner in the utilization of DLAs (McNabola et al., 2013), where innovation labs, such as Inland Design in the Finnish Immigration Service and the former D9 in the State Treasury, have paved the way for, and bolstered, the profile of design-led approaches. Other examples of high-profile efforts to bring design into the public sector go as far back as 2009 in the case of Finland, when Sitra (the Finnish Innovation Fund) launched the Helsinki Design Lab (n.d.). As an outcome of the increasing number of professionally and informally trained designers working in the government, communities of practice have also formed, such as the *Julkis-muotoilijat* (a community of design-minded civil servants in English).

Despite the above-described developments, there are multiple reasons why further research is needed in order to understand the current applications of DLAs. First, the application of DLAs in the governmental context is still

relatively recent and not well understood (Koskinen & Thomson, 2012). Notably, research on the current uses of DLAs in Finland (a supposed leader in this field) is scarce. Second, the claims about the benefits and contributions of DLAs to the public sector are abundant. There is a need for further empirically grounded research in order to better understand which promises of design seem to be kept, and which are not. A better understanding may lead to a more realistic image of the current uses of DLAs and help avoid DLAs becoming “a fad that failed” (Mulgan, 2014, p. 6).

A compelling case can also be made for why it is vital to investigate the current challenges in the application of design in this context. Namely, design-led approaches have been argued to be of relevance (Buchanan, 1992) in addressing so-called “wicked problems” (Rittel & Webber, 1973) which are characterized as messy and unpredictable (OECD Publishing, 2017). Perhaps the most significant potential for design-led approaches is when they are indeed called upon to address wicked challenges on a policy and strategy scale. However, researchers have argued and demonstrated that design does not “just work” when introduced to public sector organizations (see Body, 2008; Deserti & Rizzo, 2014; Kimbell, 2015). Challenges of applying DLAs are reported to range from cultural clashes between design and bureaucracy, and the rigid and siloed nature of government which may present a barrier to the application of DLAs (Bason, 2014). Better understanding of these challenges may enable much needed discussion and action in order to create the conditions in which design-led approaches may be utilized to their full, above-described, potential. Investigating the challenges related to the application of design within public sector organizations is, therefore, an essential area of research.

Consequently, the subject of inquiry of this thesis is two-fold. First, the research examines how design-led approaches are currently understood and utilized within some Finnish governmental organizations. Second, it examines the challenges identified by those trying to apply these approaches within their organizations. Design-minded civil servants in Finland who are members of a related community of practice (Julkis-muotoilijat) are uniquely positioned to speak about the current status of DLAs. Therefore, empirical data was collected through a questionnaire of these design-minded civil servants (n=33). It was interpreted with the assistance of the Design Capability Framework, which includes three dimensions related to an organization’s knowledge of design and the ability to use design (Malmberg, 2017). Obtaining a better overview of the current landscape of DLAs in the public sector may help identify areas for development and may prompt discussion about concerted efforts to improve the utilization of design in this context.

This thesis is organized into five chapters. In the Background chapter, the reader is introduced to design-led approaches in the public sector, as well as the theoretical framework of design capability. The chapter closes with a brief overview of high-profile, design-related initiatives in Finland. Then, the research objectives and questions are presented, followed by an introduction of methods, methodology, and the research process. The Results chapter presents the findings of the empirical part of the thesis. Finally, the Discussion chapter elaborates on the implication, limitations, and validity of the results.

1.

Background

This chapter first introduces and defines the term design-led approaches (DLAs). Then, the reader is introduced to some of the reasons behind the increasing popularity of DLAs in the public sector context as well as to some criticism to this practice. The following section presents different ways to bring DLAs into public sector organizations. Further, the concept of design capability is introduced as the theoretical framework of the thesis. Finally, notable examples of DLAs abroad, but especially in Finland, are briefly described to set the stage for the empirical part of this thesis.

1.1 DEFINING DESIGN-LED APPROACHES (DLAs)

This thesis revolves around the topic of design capability. What I mean under capabilities is elaborated at a later point in this chapter. But first, the terms design and design-led approaches are briefly introduced.

At the time of writing, a search on Google Scholar revealed 340 hits for the term design-led approaches (DLAs) and 955 for the singular version of the same term. This search result is not insignificant. However, when contrasted with a search on design thinking (another general design term) resulting in 59,500 hits, it becomes clear that the term design-led approaches is far from wide-spread. This search also reveals that researchers in multiple fields refer to DLAs, such as design management (Bucolo, Wrigley, & Matthews, 2012), urban planning (Cooper, 2000) and even in health care (Buckle et al., 2003). In the design field, the term is utilized by some authors primarily related to innovation (e.g., Wrigley, 2017), but mostly it is used as a descriptor and remains undefined (see Bailey M. et al., 2018; Lockton, Bowden, Greene, Brass, & Gheerawo, 2013; Wallace et al., 2013).

However, in the paper “Valuing Design in Public and Third Sector Organizations,” Yee, White, and Lennon (2015) do offer an explicit definition of DLAs, namely as the “cognitive, social, emotional and physical activities linked to the act of designing” (p. 8). In their definition, this includes a broad array of skills, methods, tools, and perspectives of design. Following the lead of Yee, White and Lennon (2015), this thesis uses the terms DLAs and design as umbrella terms to refer to the overall application of design methods, tools, and perspectives. In their definition of the term of DLAs, Yee, White, and Lennon (2015) distinguish traditional (i.e., graphics and products) and non-traditional (i.e., services or interfaces) design approaches, and use the term to refer to only non-traditional forms of design. In this thesis, however, the term DLAs includes both of these forms of design. Additionally, according to the reviewed literature, some of the most relevant design disciplines to design in the public sector include strategic design, design for policy, service design as well as broader terms, such as design thinking (for a brief overview of the most relevant terms, see Appendix A).

The use of the term DLAs comes with its benefits and challenges. The benefit of using the term design-led approaches as opposed to other general design terms, such as design thinking, is that design-led *approaches* do not

deny or ignore the diversity of design practices and their histories. Kimbell, an esteemed design researcher and educator, criticized design thinking in her review (2011b) for this very reason. Nonetheless, the term design-led approaches is admittedly widely encompassing and broad, which can be considered a weakness. However, the main focus of this thesis is to investigate how DLAs are currently used, what function they help to fulfill, and to identify the related challenges. Choosing to study a specific design discipline, such as service design, would have painted a perhaps more focused, but limited, picture of the application of DLAs in the context of the public sector. Additionally, the specific definitions of these design disciplines are contested within the literature, and in practice, they are even less carefully defined or examined. Investigating a single discipline would have led to a narrow view of the breadth of applications of design in the public sector. Consequently, it would not have served the purpose of this research to gain a more holistic understanding of the application of DLAs.

1.2 THE RISE AND PROMISE OF DLAs IN THE PUBLIC SECTOR

Design and DLAs, as defined above, are being explicitly utilized within the public sector and this is a relatively recent phenomenon. There are multiple converging reasons why design may have become increasingly prominent in this setting, which I learned about during an extensive literature review on the topic of design in the public sector, including design for policy, service design, strategic design and design thinking. DLAs seem to offer a compelling approach and set of tools to public problems of varying kind. For example:

- Design is argued to be well equipped to address complex problems
- The customer centric approach of design promises to provide better value while saving costs in times of austerity and larger administrative reforms
- Design is argued to offer integrated and collaborative ways to approach problems in siloed public sector organizations looking to embrace more collaborative forms of governance
- Design has also been argued to be relevant in the transformation of public sector organizations looking for change
- The prototyping and the visualization aspects of design seem to be relevant in making nebulous issues tangible and assist in communication

Although the exact promise and relevance of design-led approaches depend on the particular design discipline and the specific context to which it is applied, the next section presents these similarities in the description of promises across the different design disciplines and broader trends related to the rise of DLAs.

1.2.1 The appeal of DLAs in the wake of complex problems

The number of wicked problems (Rittel & Webber, 1973) governments are tasked to address are numerous and include climate change and the aging population (OECD Publishing, 2017). These problems are characterized as being ill-defined, ever-shifting, and not definitively solvable (Rittel & Webber, 1973). As a response to the complexity of problems, there is a growing recognition in the sector for a need of new approaches to governance (Junginger, 2017; OECD Publishing, 2017). Design approaches are seen as relevant to the above, as they have been argued to be suitable to address wicked problems (Buchanan, 1992) with their fresh thinking and radical ideas (Bason, 2010; Mulgan, 2014). Additionally, the iterative and collaborative approach of DLAs are presented

as “invaluable” for addressing these nebulous issues (Koskinen & Thomson, 2012, p. 57). Moreover, designers are increasingly adding a systems approach to their work (Jones, 2015; Mulgan, 2014), which enables better identification of root causes and a holistic view of problems they are called on to address (Mulgan, 2014). Koskinen and Thomson (2012) add that the innovation stemming from design may help organizations stay more resilient to wicked problems in the long term.

1.2.2 Design as a way to save costs while providing better value

Design is often portrayed as an approach which may result in cost savings while improving public value. In times of austerity, design promises to “square the circle” (McNabola et al., 2013, p.16) — resolving the seemingly contradictory aims of saving money while providing better services (Deserti & Rizzo, 2014). In the “Design for Public Good” report published by the British Design Council (McNabola et al., 2013), the design thinking approach is argued to bring user perspectives inside the government, thus creating services and solutions that fit user needs, and resulting in desirable, accessible, and efficient service provision that users are more ready to accept (McNabola et al., 2013). Similarly, Stickdorn, Hormess, Lawrence, and Schneider (2018) highlight the ability of service design for bringing customer experience to the forefront. Design approaches are also seen as a way to test and prototype solutions in a small and fiscally responsible manner, before costly piloting and scaling (McNabola et al., 2013) in the context of policymaking. As a result of better policies and services, staff providing them may be more fulfilled as well (McNabola et al., 2013).

The emphasis on creating more efficient services and a focus on the “customer” also corresponds with substantial governmental reforms over the past three decades, termed as New Public Management (NPM). NPM has brought the logic of the private sector into the public sector (Torfing & Triantafyllou, 2013). This imported logic has been primarily informed by assumptions of neoliberal economics (Hartley, 2005). NPM efforts “have been heavily inspired by market principles of competition, efficiency, and customer satisfaction” and brought with them the adoption of related management techniques (Torfing & Triantafyllou, 2013, p. 10). In NPM, citizens are primarily perceived as customers (Sangiorgi, 2015).

According to Lægreid and Christensen, NPM originated from Anglo-Saxon countries; it has been adapted to varying degrees with a significant impact on public organizations all over the world (2017). The authors add, however, that these trends perhaps have had less influence in the Scandinavian context, as Scandinavian countries have been less eager to adopt the reforms. They cite a lesser “cultural compatibility” (2017, p. 5) such as stronger egalitarian values and less favorable constitutional and parliamentary conditions (e.g., minority coalition governments) as possible reasons. Since its inception, the popularity of NPM has withered partly due to its adverse effects including an increasingly fragmented public sector (Lægreid & Christensen, 2017). However, Lægreid and Christensen (2017) add that its influence is still present, as administrative approaches are rarely entirely replaced by reforms, but rather co-exist in some shape or form (Christensen & Lægreid, 2008). It seems that the promise of design of efficiency and customer focus echoes notions of NPM, which may have increased its perception as relevant.

1.2.3 Design as a new, integrated, and collaborative way to approach problems

Design has also been argued to offer a new integrated and collaborative way to approach problems. For example, Christian Bason argues that design promises to bring a different approach to “understanding public problems” (Bason, 2014, p. 4). Bason is the chief executive of the Danish Design Centre,

a long-time proponent of design in the public sector and prolific author on the subject. Bason was the director of Mindlab, an inter-ministerial public sector innovation lab (Hermosilla, 2016) when it was still operational. He, among others, argues that design-led approaches seek to break through the siloed organizations by identifying and engaging relevant actors together through their collaborative features (Bason, 2014; McNabola et al., 2013; Mulgan, 2014; Stickdorn et al., 2018), connecting citizens, civil servants, front-line workers, and public managers alike (Junginger, 2017). Additionally, design offers a holistic process to policymaking, ranging from problem space definition, ideation, tangible articulation and to the implementation of policy (Bason, 2014; McNabola et al., 2013). Sabine Junginger, a scholar in the field of design management, echoes the above and adds that design processes may help integrate policymaking and policy implementation, which are often separated in current policymaking practices (2017).

More recent public reforms, such as New Public Governance (NPG) can also be argued to contribute to the appeal of the collaborative aspect of design. NPG refers to a set of principles that embrace “more cooperation, negotiation, and the active participation of relevant stakeholders, who are envisaged to chip in with their knowledge, ideas, and resources” (Torfing & Triantafyllou, 2013, p. 12) to deliver better policies and services. The NPG approach rests on the idea that diverse actors come together and participate in the making of policies and the delivery and development of services (Torfing & Triantafyllou, 2013). In her study of seven design agencies working in the UK public sector, Sangiorgi (2015) argues that service design approaches may facilitate the paradigm shift from New Public Management to New Public Governance, helping to reconfigure the relationship between governments and citizens.

1.2.4 Design as a way to transform public sector organizations

Design has also been argued to be relevant in the transformation of public sector organizations and communities. A growing body of research has started to examine the role that design approaches may play in this transformation and change. For example, in her research, Sangiorgi (2011) examined the role of service design in transformational change, and posits that service design is increasingly discussed as an “engine for a wider societal transformation,” where it supports “the emergence of a more collaborative, sustainable and creative society” (2011, p. 30). Sangiorgi observes that not all change is equal in its impact and depth, and adds that researchers in organizational development have articulated different levels of change (2011). Transformational change can be classified as second-order change, which requires a change in the core assumptions of organizations or communities as well as their mission and purpose (Sangiorgi, 2011).

Junginger and Sangiorgi (2009) further examine the relationship between service design and organizational change through two case studies. They observe that service design projects may infiltrate the organization to different levels and therefore, can impact the organization to different degrees. They explicate three levels of change. At the first level, the focus is on the design of interactions, utilizing product interface design and user-centered design skills. If the service design project is peripheral, it may affect artifacts and behaviors. This type of intervention may have long-term impact on the organization but is unlikely to result in organizational transformation. Junginger and Sangiorgi (2009) observe that when service design engages at the second level, it may start to question norms and values within the organization. However, this may still not necessarily result in organizational transformation. At the third, organizational transformation level, the service concepts start to question fundamental assumptions of the organization, more likely to result in second-order change. These scholars highlight the interest in the potential of design to influence organizational change, with a particular focus on transformation.

1.2.5 Visualizing and prototyping through design

Lastly, specific design tools, such as prototyping and visualizing, have also been lauded for their relevance in the public sector. Prototyping, for example, is said to make nebulous issues tangible and help test ideas quickly (McMullin, 2012; Mulgan, 2014). Additionally, the design approach is often visual throughout, helping to communicate ideas through sketches and diagrams for example, and making them more convincing (Mulgan, 2014). These qualities of design have been demonstrated as valuable in research by Yee, White, and Lenon (2015). They examined what various stakeholders valued in the application of design-led approaches to service innovation projects in six case studies in public and third sector organizations (Yee, White & Lenon, 2015). The participants of their research valued the tangible outputs for their ability to facilitate conversation and critique of ideas. Further, they valued visualization and storytelling for their ability to build alignment between participants about the current context and future possibilities.

1.3 CRITICISM TOWARDS DESIGN IN THE GOVERNMENT

There are ample claims about the potential benefits of DLAs, as demonstrated in the section above. However, DLAs are also criticized within and outside of the design discipline when applied in the governmental context. This thesis takes more of an explorative approach to the topic of design-led approaches in government. However, these critical views are added to further contextualize this emerging design field and the discourse surrounding it.

In his paper, “Design in Public and Social Innovation: What Works and What Could Work Better” (2014), Geoff Mulgan (n.d.), current CEO of Nesta (UK’s Innovation Foundation) outlines the weaknesses and often-cited criticism towards design-led approaches. He claims that the cost-saving promise of design is overly simplistic and lacks a broader view of how costs may be shifted to other services for example. He observes that designers generally over-promise and under-deliver on grandiose claims. Mulgan adds the fixation of designers on “fresh ideas” limits learning from past failures. In his closing words, Mulgan suggests that the conversation on DLAs must turn from promotion and showcasing towards one of mutual learning. He aptly claims that “design needs to learn as well as teach if its full potential is to be realized. If it does, it could become one of the defining fields of the next few decades. If it doesn’t, it risks being seen as a fad that failed” (Mulgan, 2014, p. 6).

Academics and practitioners alike have raised the issue of disregard for political aspects of design. In the context of designing for services, Penin and Tonkinwise (2009) highlight that what makes service design a different profession is that it concerns itself with “design of people” (p. 4327) and their arrangements, making it a highly political act. The political aspect is perhaps even more acute in the governmental context, where service designers largely shape the relations between service providers, citizens, and other stakeholders. Furthermore, Kimbell and J. Bailey (2017) express concern about some problematic aspects regarding the adoption of prototyping into organizational practice in government. They argue that prototyping may mask the inherently political nature of policymaking, and it is not clear how a prototyping practice may “relate to concurrent forms of democratic participation” (p. 222). They add that prototyping may further embed “market logics” (p. 214) into government, by emphasizing flexibility, provisionality, and anticipation.

Critical appraisal of design thinking appears in the realm of political science and public administration as well. For example, Clarke and Craft (2018)

deliver a strongly worded critique of design thinking in policy, highlighting that design fails to address four aspects of policymaking:

- (a) the political context within which designs unfold, and that complicate simplistic applications of strict “user centrism” as derived from private sector experiences;
- (b) the human, financial, and organizational resources needed to support its practices;
- (c) the range of policy styles and related governance arrangements that may be appropriate to a given policy sector, jurisdiction, and policy problem; and
- (d) the need for designs to be interoperable within complex policy mixes (multiple policies, policy aims, and policy instruments operating concurrently).

(Clarke & Craft, 2018, p. 2)

Clarke and Craft (2018) add that bringing design thinking into the governmental context is similar to the New Public Management reforms. They argue that it imports the logic, assumptions, principles, and practices originating in the private sector, which are “not always fit for purpose” (Clarke & Craft, 2018, p. 2). At the same time, McGann, Blomkamp and Lewis (2018) bring to attention that there is a lack of evidence on whether the addition of co-creation and co-design in policymaking do, in fact, result in better policies. The issue of limited evidence on the benefits and impacts of co-design applied to public policy were also recently questioned by Blomkamp (2018). Lastly, von Busch and Palmås in their critique of design thinking applied in the public sphere, highlight ways in which “design may be complicit in supporting elites” (2016, p. 19) by shifting agency to designers and away from citizens. They add that design thinking may be used to pacify citizens by way of “better” service provision. This may distract from demanding more radical change, in light of the 2008 financial crisis and increasing social injustice (von Busch & Palmås, 2016).

With a brief overview of promises and critiques of design-led approaches in the public sector, the next section introduces how DLAs are brought into the public sector.

1.4 INTRODUCING DLAs INTO PUBLIC SECTOR ORGANIZATIONS

Despite the criticism towards a design practice in the governmental context, DLAs are increasingly introduced into a public sector setting. There are many ways in which design competence may be brought into a public sector organization, varying in its role and function as well as the depth of its integration. Currently, popular options include setting up a specialized design unit inside the organization, procuring design services from external design agencies, hiring individual designers, and training civil servants already working inside the organization in DLAs, or a combination of the above. Outsourcing design and relying on consultancies to bring the design skills into the public sector seems to be the most preferred option globally (Bason & Schneider, 2014). This brings into question “whether this leads to a lot of focus on concept design and early ideation process, but not so much on driving actual, gritty organizational change and implementation” (Bason & Schneider, 2014, p. 39). The use of design consultants has been criticized because of the associated costs, and short-term project-based engagements with consultants may fail to have a demonstrable impact (Mulgan, 2014). Indeed, how best to introduce design approaches remains a fundamental question, and there is

a growing interest in developing internal design competences (Sangiorgi & Prendiville, 2017).

1.4.1 The rise of the design-minded civil servants

An increasing hire of formally trained designers to work within governmental organizations illustrates the interest in developing internal design competences. Additionally, there have also been efforts to introduce design approaches to those without formal design education working inside governmental organizations. In the work of former D9 in Finland, for instance, a major goal was to increase the design competence of civil servants working in state government who were unfamiliar with this approach (State Treasury, 2018). Recommendations advocated by European Union-level initiatives and organizations echo increasing design competence in the public sector. For example, the “Design for Growth and Prosperity” report (Koskinen & Thomson, 2012) published by the European Commission Directorate General presented two recommendations: 1) increase the use of design and designers in the public sector innovation and 2) build design competence with public sector administrators to utilize and procure design in their work (Koskinen & Thomson, 2012).

Similar recommendations arose in the “Design for Public Good” report (McNabola et al., 2013), published by the UK Design Council as part of the Sharing Experience Europe (SEE), which was a key project of the European Commission’s European Design Innovation Initiative. In the report, the authors encouraged EU members and their municipalities to diagnose their current state and create a road map for developing design capability. They also encouraged states to use design approaches on a policy-level, by procuring design services and simultaneously developing design competence in-house through training, workshops, and small projects.

In Finland, the number of civil servants with formal and informal design training is on the rise. This is demonstrated by the formation of a local design-minded civil servants’ community called *Julkis-muotoilijat* (for a full description of the community, see page 30). In this thesis, civil servants are considered design-minded when they have acquired some level of design competence and knowledge of DLAs, whether through formal or informal means, as well as those who are practicing design-led approaches in their work within the sector. These individuals are embedded in the public sector and have a unique view on bringing design-led approaches into the organizations and the difficulties associated with applying these approaches in this context. Therefore, this research looks primarily at the perspectives of design-minded civil servants.

1.4.2 Models for assessing the position and use of DLAs

Whether design competences are internal or external to the organization is only one consideration when determining an organizations’ so-called “design maturity.” Various models have been developed that help examine the current use, understanding, and positioning of design-led approaches within an organization, in addition to the location of design competence. Some of the models use a ladder analogy, suggesting a path of progression for organizations. In the public sector, one of the most notable examples of such models is the Public Sector Design Ladder published by the Design Council (McNabola et al., 2013). Notable models in the private sector include the Danish Design Ladder (Ramlau & Melander, 2004; for a more detailed account of the different models, see Appendix B). From all the considered models, Junginger’s (2009) model featured in Figure 1 is particularly compelling because it captures a layered view on the positioning of design within an organization. It considers both the source of design competence (whether it is internal or external) and the level of integration of design to the functions of the organization.

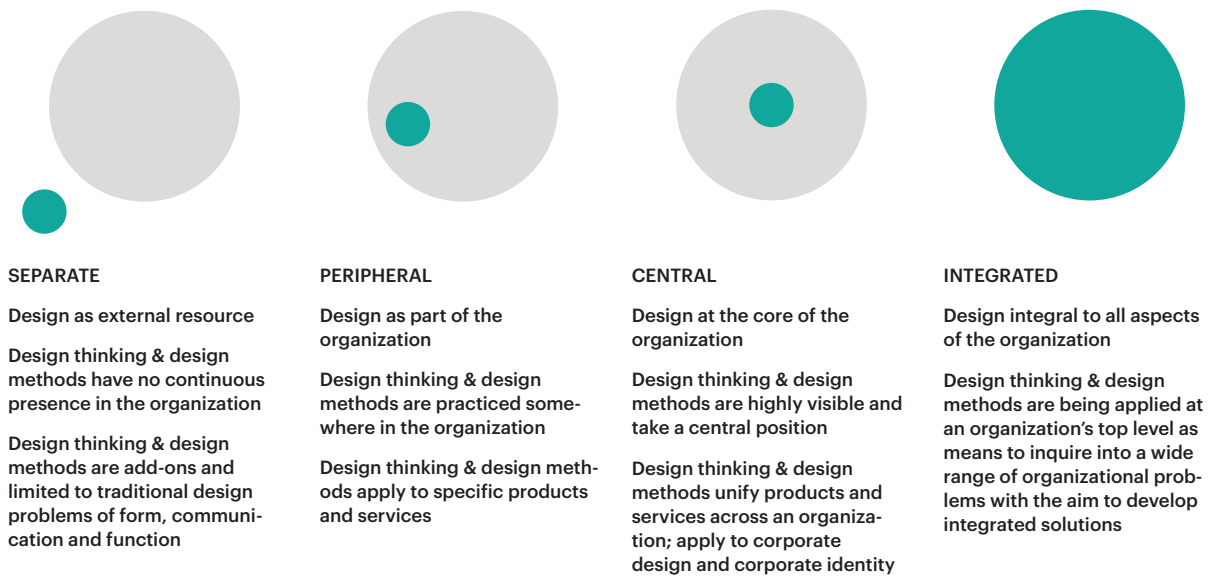


FIGURE 1: Figure adapted from Junginger (2009, p.5) and Dubberly (2012) which describe a range of positioning of design thinking in an organization.

It outlines four archetypes for how design-led approaches may relate to an organization: separate, peripheral, central, and integrated (Junginger, 2009). This model is later used to reflect on some of the research findings.

1.4.3 Challenges in using DLAs in public sector organizations

No matter the exact configuration of design within an organization, researchers argue that design-led approaches won't simply "work" when introduced into the organization (Deserti & Rizzo, 2014; Malmberg, 2017). Design-led approaches face significant challenges when applied in this setting. Bason (2014) aptly sums this up by stating that there is an "inherent clash between the logic of administrative organization and the sensibilities of a designer" (2014, p. 5), and outlines the differences in logic in Table 1 below. Bason (2014) also raises the question of whether designers are ready to handle the sheer complexity of public policy.

When speaking more generally about using design-led approaches to propel innovation in the public sector, Bason (2010) outlines the many troubles laying ahead for design. He describes political unwillingness to pursue long-term benefits, the strong cultural barrier of failure avoidance as well as structural

TABLE 1: The differences in logic and approach of government and design adapted from Bason (2014, p. 6).

GOVERNMENT	DESIGN	GOVERNMENT	DESIGN
Analysis	Synthesis	'Thinking it through'	Rapid Prototyping (thinking through doing)
Rational	Emotional		
Logical	Intuitive		
Deductive	Inductive	Single disciplines (e.g., law, economics)	Multiple disciplines, T-shape
Solutions	Paradigms, platforms	Elegance	Impact, value, diffusion

barriers such as siloed organizations, hierarchy and bureaucracy, and the goal of government to maintain stability. Additionally, he highlights the disconnect of governments from their citizens, and that generally outcomes of governments' actions are hard to measure, as there is a lack of timely feedback. The most dominant processes in government are linear, clashing sharply with the iterative, inherently messy design processes (Bason, 2010).

In their practice-based accounts, J. Bailey and Lloyd (2017) and Kimbell (2016) describe the tension between the knowledge that is perceived as legitimate in the UK policymaking context and the kind of knowledge that design-led approaches produce. Knowledge resulting from DLAs can be seen as problematic in the context of policymaking, as it may not be perceived as “sufficiently representative, quantifiable, or reliable” (Bailey J. & Lloyd, 2017, p. 8). As J. Bailey and Lloyd aptly put it, “Designerly ways of knowing (Cross 2001), it seems, are rather different to policymaking ways of knowing” (2017, p. 8).

1.5 DESIGN CAPABILITY IN PUBLIC SECTOR ORGANIZATIONS

Regardless of how design-led approaches are positioned, and the various challenges the approach may face, the intention is to utilize design within the organization. Design capability is an emerging concept that emphasizes the ability to use DLAs, accentuating a broader view looking at organizational conditions surrounding the application of DLAs. This is an applicable concept because, as elaborated in the previous sections, DLAs do not simply just work when introduced into the public sector context. Researchers related to the field of design as well as business and management refer to individual and organizational design capabilities (e.g., Bailey S. G., 2012; Deserti & Rizzo, 2014; Lin J.-Y., 2014; Lin T., 2016; Malmberg, 2017). Some even argue that design capabilities are a prerequisite for effective service and policy delivery (e.g., Lin J.-Y., 2014).

While there is not a widely agreed definition of design capability, Malmberg (2017) broadly defines it as both the knowledge and the ability to use DLAs within an organization. In her Design Capability Framework, Malmberg (2017) presents three dimensions that are critical for organizations to be able to utilize design-led approaches:

- 1) the availability of design resources, such as people with design competence
- 2) awareness of design, such as understanding of what design approaches mean and how they are used
- 3) structures that enable the use of design, such as the connection of design practices to various organizational structures (Malmberg, 2017)

In this thesis, the Malmberg (2017) Design Capability Framework plays a vital role in helping to reflect the perspective of design-minded civil servants from a more systemic point of view. It helps consider the broader organizational conditions at play, which may very well influence an individual's ability to apply design-led approaches.

In the following section, first the terms design competence, capacity, and capability are differentiated. Second, I describe Malmberg's Design Capability Framework (2017) in further detail.

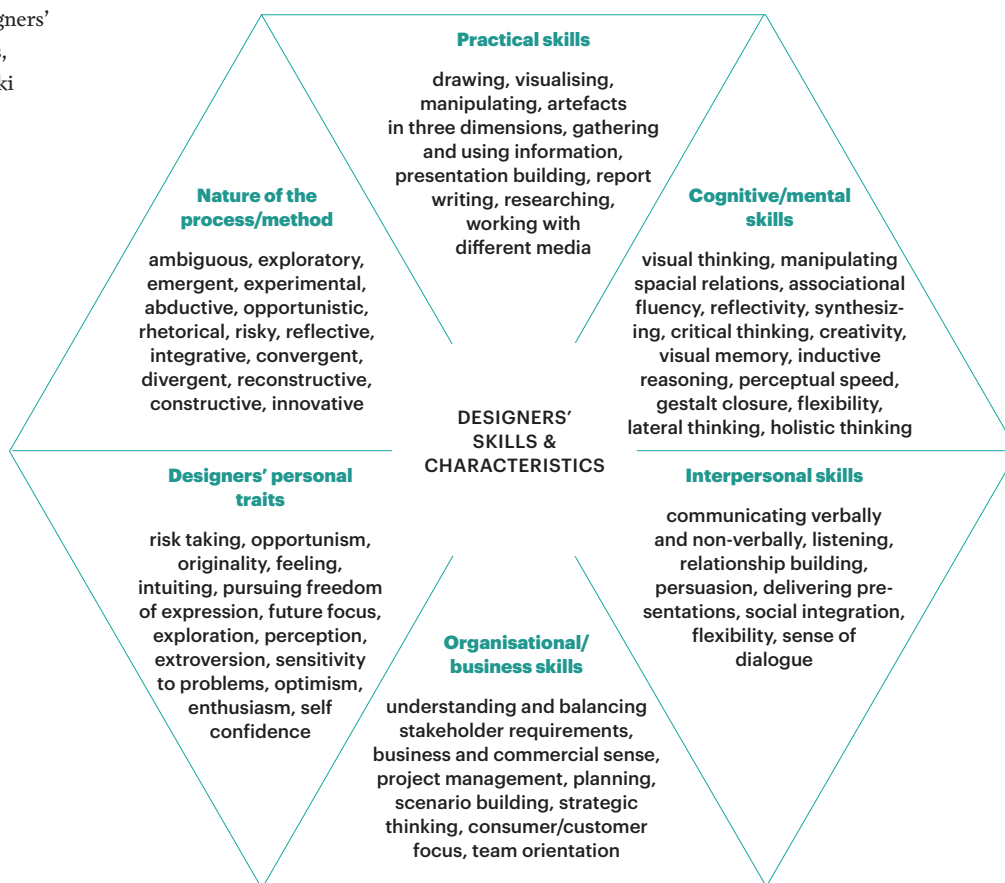
1.5.1 Differentiating design competence, capacity, and capability

Scholars in innovation, design management, and design studies have enthusiastically used the terms design competence, design capacity, and design capability concerning the existence and application of DLAs in private and public sector organizations (e.g., Bailey S. G., 2012; Lin J.-Y., 2014; Mutanen, 2008). The terms are related, synonyms of one another, and used interchangeably. However, in the literature they are sometimes used in direct contradiction to one another, often without a clear definition and description (Malmberg,

2017). In order to clarify the differences between the terms, they are briefly defined below.

Competence is perhaps the most obvious of the three terms, broadly referring to “the quality or state of having sufficient knowledge, judgment, skill, or strength (as for a particular duty)” (“Competence,” 2019). It is reasonable then to define design competence as the attitudes, skills, tools, methods, and processes that are specific to the design profession. I do not attempt to present a comprehensive review of how “design doing and thinking” have been studied or understood (see instead, for example, Kimbell’s, 2011b, compendium). However, Michlewski’s (2015) visual summary of design skills identified through his literature review in design studies, experimental psychology, and design management gives a helpful overview of what these design specific skills may be (see Figure 2).

FIGURE 2: Some of designers’ skills and characteristics, adapted from Michlewski (2015, p. 56).



It is important to note that whether design as an activity is specific to the design profession remains disputed. Herbert Simon’s view of “everyone designs who devises courses of action aimed at changing existing situations into preferred ones” (1996, p. 111) highlights a very inclusive definition of design and designers. Connected to this discussion is whether practices that appear as professional design are the only forms of design worth considering. “Silent design”, a term coined by Gorb and Dumas (1987), describes the work of those who are engaged in the development of artifacts or system of artifacts but may not have been professionally trained in design nor recognize their activity as design. Further, Junginger argues that no matter the organization, people within it are “busy conceiving of structures, processes, procedures, products and services; they plan, develop, realize, deliver and implement these on an ongoing basis” (2015, p. 211), and therefore, their activities can be considered as design activities. These silent design practices form design

legacies of organizations and initiating a conversation around them may play a critical role when trying to apply service design in an organization (Junginger, 2015). However, they are often disregarded or remain unidentified because they may look different from professional design practices (Junginger, 2015).

Differentiating capacity and capability is a more challenging task. Malmberg (2017) differentiates the term capacity as something closer related to quantitative measures based on a dictionary definition of the term. I interpret capacity similarly, where it is most suitable to refer to the quantity of available resources. In the case of design capacity, this could mean the availability of individuals with design competence for example. Capability, however, is closer related to an “ability to perform” (Malmberg, 2017, p. 49). Through her review of literature, Malmberg (2017) defines design capability as a multidimensional concept that includes the ability to use DLAs (including design resources and structures that enable design) as well as the knowledge of DLAs (e.g., awareness). In their definition, Lima and Sangiorgi (2018) adopt a similar, if more limited definition of design capability in the context of service design. They interpret design capability as the span and scope of design practice, the level of integration of design within the organization and the availability of people trained in design.

From the reviewed terms, design capability is perhaps the most relevant because it examines an ability to use design approaches, rather than prioritizing quantitative measures of resources or focus on individual design competence. As the work of S. G. Bailey (2012) of bringing service design approaches into a Scottish public sector organization points out, design resources alone in the form of design trained individuals is often not sufficient for the effective utilization of design within an organization. From the two definitions of design capability presented above, Malmberg’s (2017) definition is favored in this thesis because it is more thorough, substantial and substantiated as compared to the Lima and Sangiorgi (2018) definition. Thus, in the next section, Malmberg’s (2017) definition and framework of design capability is expanded upon and later used for interpreting the research findings.

1.6 DESIGN CAPABILITY FRAMEWORK

Lisa Malmberg, a post-doctoral researcher in the field of design and design management, has dedicated her doctoral dissertation to study the development of design capabilities in public sector organizations (Malmberg, 2017). In her dissertation, Malmberg (2017) presents a thorough review of the literature on design management, design studies, and reports in order to define design capability. In her review, she considered relevant literature relating to both public and private sector and varying contexts within, noting that the framework she derived was not specific to a single context. Her dissertation is quite recent, and the literature review on design capabilities appeared methodologically sound. Therefore, repeating the literature review on design capabilities was deemed unnecessary, but many of the articles referenced by Malmberg were read.

In her dissertation, Malmberg observes that design capability is an “eclectic” concept, which “is used in relation to many different aspects of an organization’s ability to utilize design”, if the term is at all defined or described (2017, p. 47). By examining the literature, Malmberg (2017) created a framework for how design capability can be understood. Her synthesis has resulted in a framework that considers the broader organizational context in which individuals with design competences are located. She identifies three distinct ways in which design capability is perceived within the literature, namely:

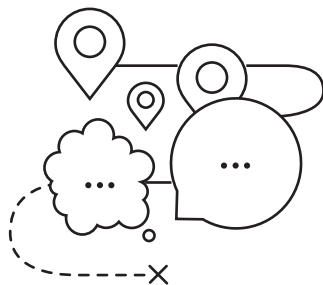
- 1) design capability as a design resource;
- 2) design capability as an awareness of design; and

3) design capability as the structures that enable the utilization of design.

At the end of her dissertation, based on the empirical part of her study, Malmberg (2017) adds that, in effect, design capability can be understood as knowledge about design and an ability to design, which correspond to the three dimensions she identified. The second framework featured in Malmberg's dissertation is absorptive capacity which is an organizational learning construct (2017). For the purposes of this thesis, I refer to only the part of the framework related to design capability, as organizational learning was outside the scope of this research.

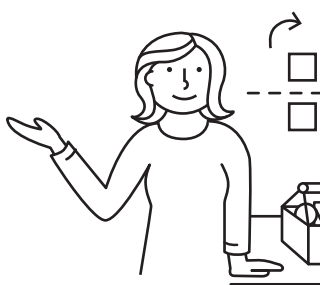
The Design Capability Framework is not strictly defined, which could arguably be considered its weakness. However, I selected it due to its holistic nature and because of its relevance to the public sector and the research intentions of this thesis. Other related frameworks, such as the Design Capacity Model (Storvang, Jensen, & Christensen, 2014) or Models of Managing Design (Heskett & Liu, 2012) are more relevant to the private sector and focus more on design *management* capability. Therefore, Malmberg's framework (2017) was chosen as the preliminary reference. The section below summarizes Malmberg's (2017) three dimensions of design capability.

1.6.1 Design capability as awareness of design



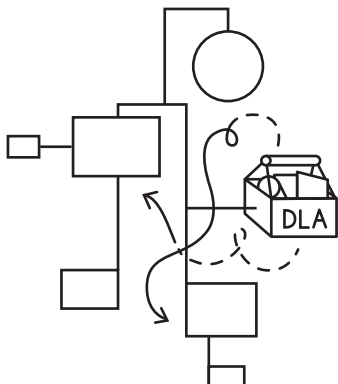
According to Malmberg (2017), the interpretation of design capability as awareness of design is mainly concerned with how people within organizations understand what DLAs are and how to use them. In her view, it includes understanding the process of DLAs, tools, methods, and how design approaches may contribute to organizational objectives. Malmberg (2017) adds that the perception of the potential contribution of design may influence how design is utilized and developed within the organization. The awareness of design may also be closely related to how DLAs are currently utilized within the organization (Malmberg, 2017).

1.6.2 Design capability as design resource



In Malmberg's (2017) review, design capability also refers to the availability of human and non-human resources related to design competence. She elaborates that human resources include people in possession of design competence, for example, the skills, activities, methods, processes, and tools that are specific to design (for a more detailed description of what those skills include, see Differentiating design competence, capacity, and capability on page 22). Moreover, she adds that resources include the availability of non-human resources, such as facilities, tools, computer programs, that are needed to conduct a design practice. She argues that design competence can be located internally or externally. Design competence may be internally developed by training civil servants or hiring designers, or externalized by procuring the services of design agencies, or a combination of the two (Malmberg, 2017).

1.6.3 Design capability as structure enabling design practice



According to Malmberg (2017), this aspect of design capability relates to the ability of an organization to make use of design and enable the utilization of design competencies within the organization. She outlines how the reviewed literature described organizational acceptance, integration, and assimilation of design practices as relevant to design capability. In addition, structures, routines, and processes influence how well design practices are utilized by the organization (Malmberg, 2017). Design capability is also related to the design management capability of an organization (Acklin, 2013b; Mortati et al., 2014, as cited in Malmberg, 2017), which is "related to the management of an organization's design resources and the collaboration between design and

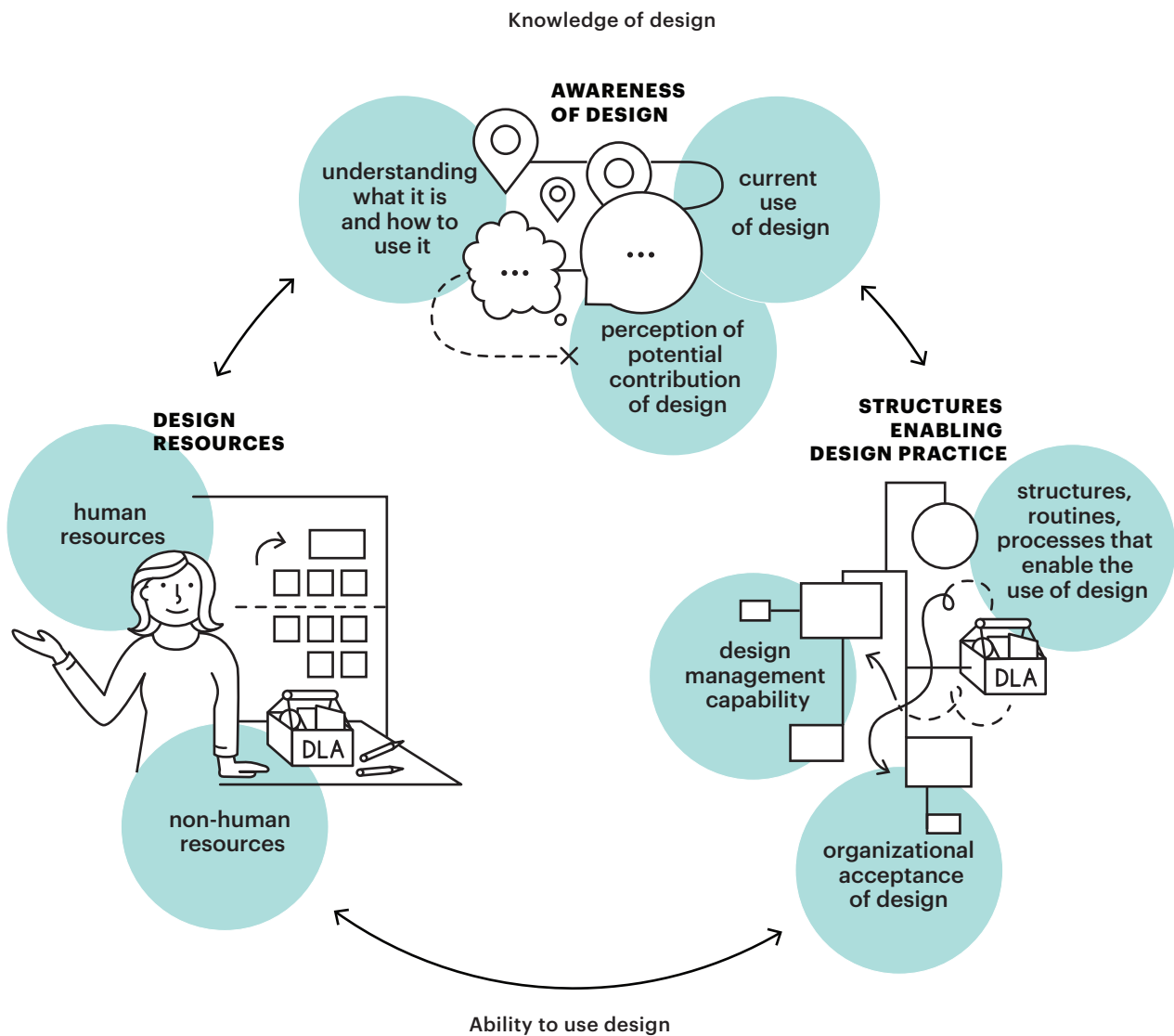
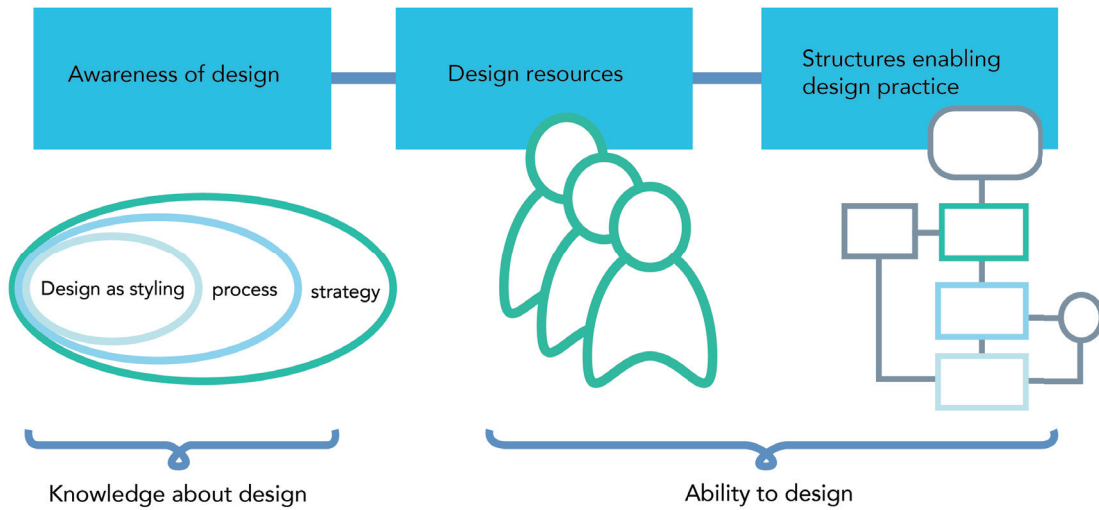


FIGURE 3: The three dimensions of design capability. The above graphic is reproduced from Malmberg (2017, p. 205) based on her literature review in design and management. The graphic below is an adapted and expanded version, based on Malmberg's literature review (2017).

other functions in the organization” (Malmberg 2017, p. 56). Following Malmberg’s (2017) lead, this thesis uses the term design capability within the context of the three dimensions mentioned above. Malmberg posits that these “three key aspects are related to an organizations ability to utilize design” (2017, p. 201).

The literature reviewed by Malmberg (2017) often recognizes that developing only one of the above-described aspects of design capability does not suffice for sustained uptake of design within an organization. She also emphasizes that “learning by doing” modules that are common in design capacity building initiatives often only focus on developing an awareness of design (Malmberg, 2017). Further, she argues that according to the reviewed literature, developing design capability is not a one-time affair. It needs to be continuously developed and maintained, as the environment and organizational priorities shift over time (Malmberg, 2017).

Malmberg’s (2017) original Design Capability Framework graphic is a simple depiction of the three dimensions she has outlined. In order to more effectively use the framework for this research, I carefully reviewed the original description of the framework. As a result, I summarized essential aspects related to the three dimensions. In the review process, it became apparent that these three dimensions are interconnected entities. Therefore, their position and connecting lines have been changed to better reflect that. Figure 3 displays the original graphic by Malmberg (2017) and below it my interpretation.

In the Results chapter of the thesis, the dimensions described in Malmberg’s framework (2017) are used as a lens to interpret the results. First, the awareness dimension is applied to examine current use and understanding of DLAs in the governmental context through the viewpoint of design-minded civil servants. Second, in order to uncover the challenges in the utilization of DLAs, the research results relating to said challenges are interpreted using all three dimensions of design capability.

1.7 EXAMPLES OF DLAs IN THE PUBLIC SECTOR CONTEXT

This section highlights various examples within the field, to illustrate the diversity within the application and integration of design in the government. Since this thesis focuses on the Finnish context, international examples are briefly introduced before showcasing relevant local Finnish initiatives in more detail.

1.7.1 DLAs in the public sector context across the world and Finland — an overview

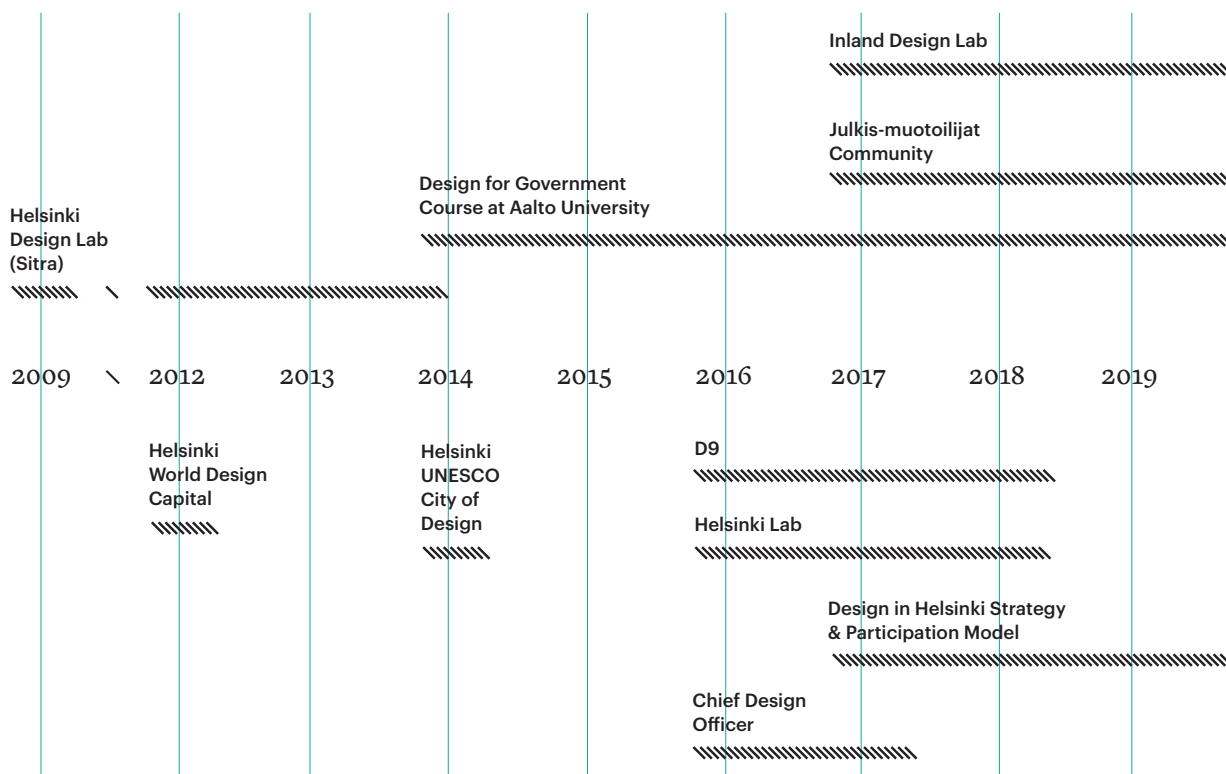
The uptake of DLAs in the public sector has been most visible through the appearance of internal units that utilize DLAs within governments around the world (McGann et al., 2018). In the EU alone, 64 public policy labs have been identified (Fuller & Lochard, 2016). For example, the former Danish Mindlab was an inter-ministerial public sector innovation lab (Hermosilla, 2016). The Policy Lab (n.d.) in the UK makes policy-making more open and brings new tools and techniques to the practice. In France, *La 27e Région* (n.d.) “conducts action-research programs to test innovative methods for designing public policy” (para. 1) through which they engage public stakeholders. Meanwhile outside of the European Union, 18F (n.d.) in the United States works on improving the “user experience of government” (para. 1) through partnering with agencies. Mexico city’s former *Laboratorio para la Ciudad* (n.d.) had the goal of generating participation, collaboration, and co-creation

with citizens. *Laboratorio de Gobierno* (n.d.), on the other hand, is an innovation lab inside the Chilean government with the mandate to introduce citizen-focused ways of addressing public challenges. While the exact approach, use of terms, and position to governing bodies and citizens may differ across the initiatives mentioned above, DLAs have played an essential role in their operations. Since the focus of this particular study is organizations within Finland, the next section will elaborate on the local design-related initiatives.

Finland, along with Denmark, has been lauded for pioneering work in the area of DLAs (McNabola et al., 2013) and has been described as one of the leading countries in the Nordics in applying DLAs in the public sector context (Bason & Schneider, 2014). Notably, the Helsinki Design Lab (n.d.) has helped put Finland on the map. It operated between 2009 and 2013 and was initiated by Sitra (the Finnish Innovation Fund). It emphasized a strategic approach to design and resulted in a rich collection of resources, and the studio model. The studio model outlined a particular approach to tackling wicked problems such as the aging population by “bringing together the right people to focus on a carefully defined problem, using a flexible process in a physical place that is conducive to collaboration” (Boyer, Cook, & Steinberg, 2011, p. 20). Additionally, the Design for Government course at Aalto University has further increased awareness of DLAs of the public and government since its launch in 2014. During the course, interdisciplinary student teams tackle briefs detailing a complex challenge faced by governmental organizations (“About Design for Government,” 2015). The briefs are commissioned by public sector organizations, which are often ministries. I had the privilege to participate in the course in 2017, where I had my first introduction and experience in applying DLAs in the government.

FIGURE 4: A time line of significant design-related events and initiatives in the Finnish public sector, inspired by Kokki (2018), Hietanen and Rehula (2018).

Furthermore, Helsinki was named the World Design Capital (n.d.) in 2012, in which one of the significant themes was “to strengthen the societal significance of design and to make design a firmer part of society” (Kuittinen et al., 2012, p. 8). A round-table organized during this time hosted 120 Nordic design experts, who discussed the future of design in 2030. The participants envisioned a future in which the state and municipalities employ designers and



utilize their practices to address welfare challenges effectively. Participants of the round-table hoped that the pace of development of design in this sector would not slow down. They hoped that municipalities and the state would embed more designers as a key resource in helping address critical societal challenges (Kuittinen et al., 2012).

Seven years after the Helsinki World Design Capital, many design-related initiatives have transpired, further solidifying its place in the public sector. The time line featured in Figure 4 captures only the most visible developments, but many other smaller initiatives have also contributed to the development of DLAs. The next section introduces some of the most visible and significant examples of design-led approaches in the Finnish governmental context.

1.7.2 Notable examples of design-related initiatives in the Finnish public sector

D9 – Support for Digitalization (*Digitalisaation tuki D9* in Finnish)

The state government recognized that digitization is a cross-cutting issue, affecting the central government and its agencies (State Treasury, 2018). Therefore, the Governmental Programme mandated a focus on creating user-friendly and efficient digital public services (Prime Minister's Office Finland, 2015) and thus, D9 was created. As part of the State Treasury, D9 was tasked with supporting governmental organizations and agencies with their digitization efforts, bringing in customer-oriented perspectives inside the government (Leppänen, 2017). D9 acted as an in-house design consultancy, providing practical and face-to-face help to agencies in need. The work of D9 started with experiments and led to a more methodological approach as learning accumulated (State Treasury, 2018). An example of their work includes improving the user experience of the Finnish National Agency of Education website. D9 also made significant efforts to increase the knowledge of design approaches amongst civil servants, through developing and facilitating the design jam² concept, for example (State Treasury, 2018).

D9 was shut down at the end of 2018, despite its success confirmed by an outside evaluation by KPMG (2018). However, the service designers from the D9 team have spread to different agencies, many finding a new home in Kela, the Social Insurance Institution of Finland.

Inland Design

Inland is a design lab and it is part of the Finnish Immigration Service (Migri), working on “co-design[ing] public services for immigrants” (“Inland,” n.d., “Welcome to Inland,” para. 1). Project examples include *Kamu*, a chatbot to help service users get answers to their questions more efficiently (“Kamu,” n.d.). Other examples of activities conducted by Inland can be found in several Master's theses at Aalto University. For example, Kokki (2018) explores the role of service design in advancing experimentation at Inland Design, describing the variety of interventions she conducted in all their richness. Swan (2018), on the other hand, focuses on the legitimacy of the design thinking approach within the organization. Inland Design at the time of writing employs three full-time designers, with additional periodic help from students.

Design in the city of Helsinki

Locally, the city of Helsinki has made significant progress in making use of design approaches to better serve its citizens' needs (City of Helsinki, 2017).

2. Design jams are usually short and intensive events. During a jam, small, diverse teams form and aim to generate solutions (i.e., prototypes) to defined challenges (Carson & Fletcher, 2018). Design jams often follow the double diamond process (see “What is the framework for innovation,” n.d., for more on double diamond process).

Helsinki Lab

Helsinki Lab embraced the slogan of “Design, digitalism and dialogue,” and had a mandate between 2016–2018 to act as a platform to coalesce actors within the city (“Helsinki Lab,” 2018). The lab brought service design to the city’s development to create a more livable and enjoyable city for all (“Helsinki Lab,” 2018). One of its first tasks was to hire a Chief Design Officer for the city (“Helsinki Lab – design, digitalization and dialogue,” 2016). Additionally, the lab ran a procurement help desk for the city divisions to support commissioning design work (Hietanen & Rehula, 2018). They facilitated the successful kick-off and briefing process between division clients and designers (Hietanen & Rehula, 2018). The lab was rather modest in size, employing two service designers, as well as the Chief Design Officer.

Helsinki City strategy and participation model

The most recent Helsinki City strategy echoes the “design, digitalism and dialogue” mantra of Helsinki Lab, explicitly emphasizing the role of design in creating user-friendly experiences for the city’s residents, while remaining cost-efficient (City of Helsinki, 2017). The city’s new participation model further highlights the importance of collaborating with citizens. It cites co-creation of services as a key way to create a user-oriented city (V. Miettinen, personal communication, January 31, 2018).

3. A community of practice can be defined as a “group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (Wenger, McDermott, & Snyder, 2002, p. 4).

4. Information for this section was gathered through personal communication with Anni Leppänen, through an interview that took place online on March 21, 2019.

Design-minded civil servants community (Julkis-muotoilijat in Finnish)

Besides these formal efforts to integrate design-led approaches, there have also been grass-roots efforts from design-minded civil servants to create communities of practice³ around applying DLAs. The Julkis-muotoilijat community,⁴ which roughly translates to a community of design-minded civil servants, was formed in 2017 and is one such example. This group can be qualified as a community of practice because it meets all three criteria outlined by Koliba and Gajda (2009). Specifically, 1) it is a group that is comprised of members which have a shared interest and expertise; 2) there is an independent (virtual) space where members engage in dialogue; and 3) the group possesses a set of common practices such as design-led approaches (Koliba & Gajda, 2009).

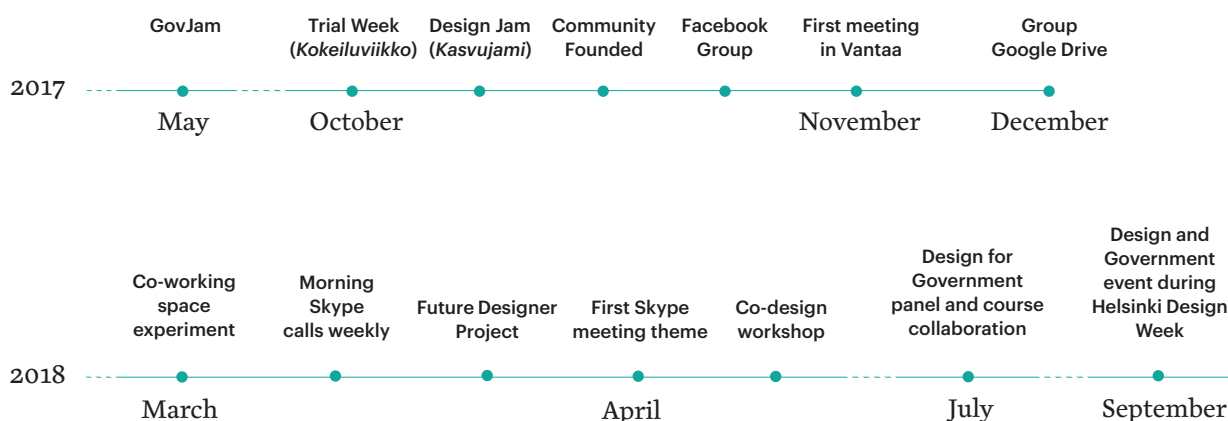


FIGURE 5: The time line of Julkis-muotoilijat activities. Graphic is adapted from the time line presented by Anni Leppänen at the Design & Government event (Leppänen, Mazé, Le, & Salgado, 2018) during Helsinki Design Week.

Founding Julkis-muotoilijat

The initial inspiration for founding this informal community of practice came after a series of design jams (see Footnote 2 on page 29 for a brief description of design jams). The design jams brought together a small group of design-minded civil servants working in several different Finnish governmental organizations. These events left the participants feeling energized, empowered, and less alone in their work to apply design-led approaches in the government. The participants felt that forming a group on a social media platform may enable them to stay in touch, share information and experiences and learn from one another even after the events ended. Anni Leppänen founded the community on Facebook in October of 2017 (see Appendix C for a screen-shot of the Facebook group). Initially, members had a variety of opinions about the exact role and mission of the community, and were unsure about what the community could become. At that point, there was not an explicitly articulated statement that expressed the principles or mission of the community.

Since its initial inception, the community has hosted countless initiatives. In the early days, the community experimented with different ways to bring together members. For example, by co-working on set days of the week and exploring the future roles of service designers in the government through the Future Designer project. Ultimately, weekly Skype calls and 4–5 live events per year prevailed as regular activities, drawing sustained participation from the members of the community. The Facebook group to this day remains an active place for discussion, and for staying updated on current development in the government. The group also shares a Google Drive, serving as a repository for relevant materials about design-led approaches.

Admission and membership to the Julkis-muotoilijat community

The community is exclusive, and eight community managers moderate admissions, facilitate and activate the group. The main entry into the community is through sending a request to join the Facebook group. The person looking to join the community must answer questions regarding their current place of work in the government, how service design relates to their work and share how they have heard about the community. Most of the members hear about the group through word of mouth, which has worked well to increase the number of participants. The group's administrators also work on identifying and reaching out to design-minded civil servants working in all levels of the Finnish government.

At the time of writing, the group had 275 members. A vast majority of the members are women and work in the Helsinki area. The latter can be explained by the fact that state government and its agencies are primarily located in Helsinki. Most of the members work for the state or state agencies, though Anni Leppänen (personal communication, March 21, 2019) highlighted the growing number of members who work in Finnish municipalities.

Future prospects of the community

In her account, Anni Leppänen (personal communication, March 21, 2019) shared that the primary value of being part of the community is to receive peer support, continue learning about design-led approaches, and develop skills and confidence. Increasingly, the community has become a place to find those who are working on similar projects or topics, resulting in close collaborations between members even across government silos. Another compelling reason for being part of the community is to receive peer support, as according to Leppänen, many members describe their work as often lonely and grueling.

After almost two years, the community has matured and grown significantly. During the spring of 2019, the organizers were working on co-creating an explicit mission and vision statement with the community. They are rede-

fining how the community supports its members, how the community may play a more significant role in advocating for DLAs, and the role of DLAs in supporting governmental transformation. Additionally, the community is considering ways to open up to and engage academia and prominent figures in the design field, without sacrificing the intimacy and trust within this community of civil servants.

1.8 SUMMARY

The Background began with defining DLAs as an umbrella term that in this thesis refers to the overall application of design methods, tools, and perspectives. The most relevant design disciplines and terms in the public sector were identified as design for policy, service design, strategic design and design thinking. These approaches have become increasingly relevant in this context partly due to a convergence of wider administrative reforms in the past decades as well as trends, such as digitization and the increasing number of acute complex problems. As described in the Rise and promise of DLAs in the public sector section, design approaches appear particularly relevant because of their promise to assist in saving costs while providing better value. They also offer a collaborative approach and are presented as particularly well-suited to address complex problems. DLAs are also perceived to assist in organizational transformation and provide visualization and prototyping as particularly valuable tools. This part demonstrated the many promises of DLAs in the public sector context, though it remains unclear which are the most realized promises of DLAs. Additionally, as this chapter highlighted, DLAs also face wide-ranging criticism from within and outside the design field, which was presented to contextualize this emerging field further.

The section Introducing DLAs into public sector organizations elaborated on the range of options through which DLAs are currently utilized in the sector. It brought to attention the Junginger's framework (2009) for assessing the level of integration and position of DLAs in an organization. It also highlighted the increasing tendency to hire designers and train civil servants in design, as demonstrated by the formation of design-minded civil servants' community in Finland. Introducing DLAs into the sector, however, is not without its challenges, no matter which way DLAs are positioned in relation to the public sector organization. Some of the difficulties were introduced in the Challenges in using DLAs in the public sector section and included issues related to the clash between the logic of public administration and the design approach. A better understanding of the current challenges in Finland may enable informed action to maximize the benefits and utility of DLAs.

The Design capability in public sector organizations section introduced design capability as a productive lens to examine the utilization of DLAs. I argued that design capability could assist in inspecting the broader organizational context surrounding the use of DLAs. The term was differentiated from more limited terms, such as design competence and capacity. Furthermore, the Design Capability Framework by Malmberg (2017) was introduced, and its three dimensions were described. Lastly, examples of the utilization of DLAs in the Finnish context showcased the variety of most visible and relevant initiatives in Finland. The history and function of the design-minded civil servant community in Finland was particularly highlighted. While there are numerous visible initiatives, there is only a limited number of empirical studies on examining the state of DLAs in public sector organizations in Finland, providing further motivation for this thesis. The group of design-minded civil servants has a valuable view of the application of DLAs in the sector. Its members work inside public sector organizations with an interest and often practical experience in applying DLAs in their organization. Therefore, this thesis primarily examines the views of these design-minded civil servants.

2.

Research Objectives

The Research objectives chapter briefly identifies the research gap and explicates the research questions which guide this thesis.

2.1 RESEARCH GAP

As presented in the Background chapter of this thesis, Finland is regarded as one of the pioneers in using design-led approaches in the public sector (Bason & Schneider, 2014; McNabola et al., 2013). DLAs have been increasingly applied in this context for the past decade (see a time line of some of the key events and initiatives starting on page 28). The appetite for hiring designers, training civil servants in DLAs and general interest in design in the sector has been steadily increasing. The size and rapid growth of communities of practice consisting of design-minded civil servants, such as the Julkis-muotoilijat community demonstrates this trend. Although progress appears to have been steady, a timely reflection may help inform the next decade of development.

First, the application of design-led approaches in this sector is still relatively recent and not fully understood (Koskinen & Thomson, 2012), and there is a limited number of empirical studies (e.g., Kokki, 2018; Lerkkanen, 2019; Swan, 2018) that examine the local conditions in the Finnish public sector. Second, there is an abundance of claims regarding the benefits of applying design-led approaches (some of them outlined on page 15). However, it is not clear which of these benefits are more or less prevalent. A more realistic understanding of the offerings and limitations of DLAs may help temper expectations and avoid design becoming a failed fad.

Second, design is argued to be well-suited to address wicked challenges (Buchanan, 1992). Some of the most pressing wicked challenges governments face include climate change, a rapidly aging population, and the migration crisis. Indeed, much of the reviewed literature points to an appeal of design-led approaches because of their ability to help governments address complex challenges. If this is accurate, design-led approaches have the opportunity to contribute to addressing these complex issues. However, DLAs do not automatically just work when introduced to the public sector (Bason, 2014; Body, 2008; Deserti & Rizzo, 2014; Kimbell, 2015), as practical accounts show. Numerous challenges may inhibit the application of DLAs, such as a clash between the logic of design and government (Bason, 2014). Examining the challenges may help to identify local barriers and enable discussion and action to create conditions in which design-led approaches may live up to their full potential.

The objective of this thesis is to reflect on the use of DLAs in Finland. The reflection is two-fold. First, I examine the perceived contributions,

current and potential uses of DLAs within some public sector organizations in Finland. The awareness dimension of Malmberg's Design Capability Framework (2017) is used to facilitate the analysis of relevant data. Second, this research examines the perceived challenges to the use and application of DLAs through the three dimensions of Malmberg's Design Capability Framework (2017). Throughout this research, the perspectives of design-minded civil servants with a membership in the Julkis-muotoilijat community are highlighted. This group has unique insider experiences and interest in applying DLAs in the sector.

2.2 RESEARCH QUESTIONS

The research questions correspond to the two aspects that this thesis seeks to examine. Namely, the perceived contribution, current and potential uses, and the perceived challenges in the application of design-led approaches. The research questions of the thesis are as follows:

- 1) What are the perceived contributions, examples of the current and potential use of design-led approaches within some Finnish public sector organizations as reported by design-minded civil servants working in them?
- 2) What are the challenges to the introduction and use of design-led approaches as reflected by design-minded civil servants working within public sector organizations?

To answer these research questions, members of the Julkis-muotoilijat community were surveyed through a questionnaire.

3.

Research Methodology, Methods & Process

This chapter introduces the reader to the context of the research, elaborates on the research approach, and the primary data collection method, namely the questionnaire administered to design-minded civil servants with a membership in the Julkis-muotoilijat community. Then, the specifics of the questionnaire are presented, along with the respondents' profile. Lastly, this chapter shares details of the data analysis process.

3.1 RESEARCH CONTEXT

The research process of this thesis started with an explorative literature review on the topic of design within the governmental context. It included the review of a significant number of articles and books on, for example, public sector innovation, design for policy, service design, and design thinking in the context of the public sector. The review of the literature continued throughout the thesis process and proceeded in parallel with the data collection by surveying the design-minded civil servants' community through a questionnaire. The goal of the literature review was to familiarize myself with the "state of knowledge in the field" (Muratovski, 2016, p. 32) and describe the findings as a thematic-based literature review (Muratovski, 2016) as presented in the Background chapter. Another goal of the review was to identify relevant frameworks and theories. The research gap was then determined based on the literature in combination with the emerging questionnaire and the collected data.

It is important to note that the collaboration between multiple actors has shaped the empirical part of this thesis. The unique opportunity for this research has emerged through a synergy between the needs of the Julkis-muotoilijat community and the principle researcher, PhD candidate Minh-Nguyet Le. At the time of writing, Le is working on her dissertation at Potsdam University in Germany. Two Master's students from Aalto University, including me, were hired as Research Assistants by Professor Ramia Mazé at Aalto University Department of Design to assist with the survey. Additionally, a member of the Julkis-muotoilijat community was part of the process. Below, the roles of these actors in the creation of the questionnaire are briefly clarified. Then, a brief description of the sequence of events that led to the development of the survey is provided.

- PhD candidate Minh-Nguyet Le at the time of writing is working on her dissertation on design-led approaches in the Finnish public sector. She is the principal researcher driving the development of the survey. Her research interest and lens include dynamic capability theory. Le performed a test of the survey before its wider distribution. She made all final decisions regarding the survey design.
- The two Master's students, Laura Lerkkanen and I were tasked with providing initial feedback on the survey. In addition, we conducted an analysis of the results and shared it with the PhD candidate as well as

the Julkis-muotoilijat community. We performed additional analysis of the collected data individually for our thesis work.

- Additionally, Anni Leppänen, founder and an active member of the Julkis-muotoilijat community, provided feedback and gave input on the direction of the survey. She has played an instrumental role in distributing the survey and granting access to the community.

The survey development started in October of 2018 by Le. It was fueled by the discussion at the Design & Government event organized in part by the actors mentioned herein and held during the 2018 Helsinki Design Week. At this event, researchers, civil servants, civil servant designers, and the interested public came together to discuss the role, difficulties, and emerging opportunities in applying design-led approaches in this context (Leppänen, Le, Mazé, Salgado, Marton et al., 2018). As a continuation of this interactive event, the survey was developed collaboratively.

The opportunity to join this research effort emerged a few months after I have started an exploratory literature review, on the topic of design for policy. My enthusiasm and interest in the topic have developed through several related hands-on projects during my studies. As mentioned previously, I had my first encounter with design in the governmental context through the Design for Government course at Aalto University in 2017. During the course, our team worked with the Ministry of Environment and Ministry of Agriculture and Forestry on a design brief related to the sustainability of the Finnish food system. In the Designing for Services course during Spring 2018 our team worked on a design brief commissioned by the city of Espoo. Our goal was to enable better collaboration between public service providers, so they can better serve businesses of all sizes in the Espoo area. These experiences were closest to a consulting type of relationship with these public sector organizations. In both of the courses, we presented recommendations and a report on our findings. After these experiences, I became fascinated with the potential application of DLAs in the governmental context. I was actively looking to partner in Finland or Canada with a governmental organization to research topics related to the application and challenges of DLAs. The opportunity to join this research process was especially valuable to me, as accessing relevant data and organizations on the use of DLAs in the governmental context proved to be otherwise highly challenging. This was partially due to time constraints, difficulty in securing access to public sector organizations, and a language barrier in the case of Finnish organizations.

3.2 RESEARCH APPROACH AND SURVEY METHOD

This thesis is an example of mixed methods research (DeCuir-Gunby, 2008), where qualitative and quantitative approaches are combined. Instead of viewing these approaches as opposing, they can be seen as complementary, as research can benefit from the strength of both while balancing their weaknesses (DeCuir-Gunby, 2008). Quantitative methods are best at providing quantifiable as well as generalizable findings but may not reflect the perspectives of the respondents fully. Qualitative methods are best suited for in-depth exploration of participant perspectives; however, they may lack generalizability (DeCuir-Gunby, 2008).

There are many ways in which these two approaches may be combined, and the degree to which each approach is emphasized. In this particular study, qualitative and quantitative data were collected simultaneously in one single questionnaire, qualifying it as “intra-method mixing” according to Morse (as cited in DeCuir-Gunby, 2008 p. 7). Out of the 18 questions, 11 were

closed-ended, and seven were open-ended, resulting in a slight emphasis on the quantitative approach. However, in the questionnaire respondents had the option to include additional free-form comments to the closed-ended questions. Additionally, even though a larger number of questions were closed-ended, the open-ended questions provided the richest insight and were foregrounded in the Results chapter.

Surveys are a widely applied research method (Fowler, 2009), and can be defined as “a systematic method for gathering information from (a sample of) entities for the purposes of constructing [...] descriptors of the attributes of the larger population of which the entities are members” (Groves et al., 2004, p. 2). According to Leedy and Ormrod, surveys are well suited to inquire about respondents’ characteristics, attitudes, and previous experiences (as cited in Muratovski, 2016). They are also well suited when the subject of the study cannot be directly observed (Balnaves & Caputi, 2001). Generally speaking, surveys are also well suited for studying large groups of people. Surveys are often favored because they are low-cost and data collection is speedy (Gillham, 2000). There is an option to maintain complete anonymity of respondents and analyzing responses to closed-ended questions is relatively effortless (Gillham, 2000).

The survey method also has its weaknesses. Surveys often work to capture the views of a smaller group of people which is representative of a larger group, but often fail to flawlessly deliver on this aim (Balnaves & Caputi, 2001). Surveys are filled out by respondents in an uncontrolled environment, which may influence their results (Balnaves & Caputi, 2001). Balnaves and Caputi add that surveys often have low response rates, and sometimes data quality may be low because of hasty or unconsidered answers (2001). Additionally, expressing oneself in writing may be more challenging for some than oral expression (Balnaves & Caputi, 2001). Gillham (2000) also adds that the wording of questions can significantly influence respondents’ answers, and that surveys are often poorly developed. In the case of this research, the survey method has helped reach a wider group of respondents. This may not have been possible through the more resource and time intensive qualitative methods, such as interviews.

3.3 SURVEY OF DESIGN-MINDED CIVIL SERVANTS THROUGH THE JULKIS-MUOTOILIJAT COMMUNITY

3.3.1 Population description and size

This thesis focuses on examining the use and challenges of DLAs, broadly in the Finnish public sector. DLAs are growing in popularity; however, they are not yet observable in all organizations throughout the sector. Surveying all public sector employees or surveying a representative sample of such a group was not feasible. Therefore, a subgroup was chosen for this thesis, namely civil servants who are design-minded. In this thesis, individuals are considered design-minded when they have some level of design competence or knowledge of design-led approaches. Additionally, those who are practicing design-led approaches in their work within the sector are included in this definition. Design-minded individuals may likely have a varied understanding of design, and their attitudes towards it may vary as well.

Currently, there is no data available on exactly how wide-spread the design-minded attitude amongst civil servants is. However, the Julkis-muotoilijat community is a community of practice consisting of design-minded civil servants. This group can be argued to be a suitable proxy for design-minded

civil servants at large. This thesis identified design-minded civil servants in the Finnish context by their membership in the Julkis-muotoilijat community.

3.3.2 Access to the sample

The Julkis-muotoilijat community congregates mostly online, using the closed Facebook page as the primary point of contact. Anni Leppänen, the founder of this group, provided access to the community, who posted the invitation to participate in the survey (see Appendix D for the original invitation). The questionnaire remained open two weeks longer than initially planned to allow more respondents to participate.

3.3.3 Procedure and instrumentation

This research employed “purposive sampling” (Trochim & Donnelly, 2006, p. 59), in which a sample of practitioners and enthusiasts of DLAs were purposefully sought out for the study. The advantages of this sampling method are that the chosen group has first-hand knowledge of the use of design-led approaches in the public sector. Their experience may shed light on how DLAs are used in this context. The disadvantage is that the sample is likely to be biased, and external validity may be weak (Trochim & Donnelly, 2006).

The subgroup chosen for the study excludes those who may be design-minded but who are not part of the Julkis-muotoilijat group. Further, it also excludes those who are not formally trained in design and do not recognize their work as design (read more about silent design on page 23). It also excludes civil servants who are not design-minded or those who may have a negative attitude towards design. Because the study focused on design-minded civil servants currently working in various governmental branches, the sample excludes designers whose services are procured externally. However, the sample of Julkis-muotoilijat community granted a unique access to design-minded civil servants that are interested in DLAs, immersed in the context and are applying or trying to apply DLAs in their work. Accessing data regarding the use of design-led approaches in the governmental context through other channels than the Julkis-muotoilijat community was not possible at the time of research.

Within the target group of design-minded civil servants with a current membership of Julkis-muotoilijat, the participants of the survey were mostly self-selected, by responding to the open invitations posted by the founder of the group in the Julkis-muotoilijat Facebook group (see the invitation text in Appendix D). The founder had also personally reached out to several group members directly, by tagging them in the comment section of the post. She selected the members in order to increase the variety of organizations represented and targeted mostly formally trained designers. Additionally, PhD candidate Minh-Nguyet Le asked nine people directly (whom she previously interviewed) to participate in the survey. The questionnaire was administered through Survey Monkey, a web survey service. Online questionnaires have been demonstrated to be equally valid to administering the questionnaire via mail or the telephone (Balch, 2010). The final sample consisted of $n=33$ participants, which at the time of writing, represented about 14% of the Julkis-muotoilijat community’s membership. It is not uncommon to have such a low response rate for questionnaires (Gillham, 2000). However, the low response rate means that results should be generalized with caution. A large portion of community members did not participate, and this research did not capture their views. Those who did participate in the survey may have been especially enthusiastic in sharing their views around DLAs.

Finally, not all participants completed the entirety of the survey. A small number ($n=2$) of respondents only responded to the closed-ended questions of the

survey. A small number ($n=6$) of respondents left a few open-ended questions blank, and one respondent left a few of the closed-ended questions blank. Since these were only minor omissions, the incomplete entries were included in the study and analyzed together with fully completed entries.

3.3.4 Questionnaire content

This thesis is explorative and descriptive (Trochim & Donnelly, 2006), with the aim of better understanding the emerging field of design in the public sector setting. Some of the questions inquired about the respondents' general views with respect to the values and characteristics of DLAs. Others specifically asked about how respondents perceive the use and application of DLAs in their respective organizations. For the full content of the questionnaire, see Appendix E.

To preserve the anonymity of the individual respondents, the name of the respondents' organization was not collected. Respondents were only asked to identify the type of organization in which they work. However, in some cases, even the type of organization may be used to identify an individual. This is due to the fact that the number of design-minded civil servants is low in specific types of organizations (e.g., prime ministers' office). Therefore, to preserve the anonymity of respondents, quotes featured in the Results chapter only identify the respondents' level of design training.

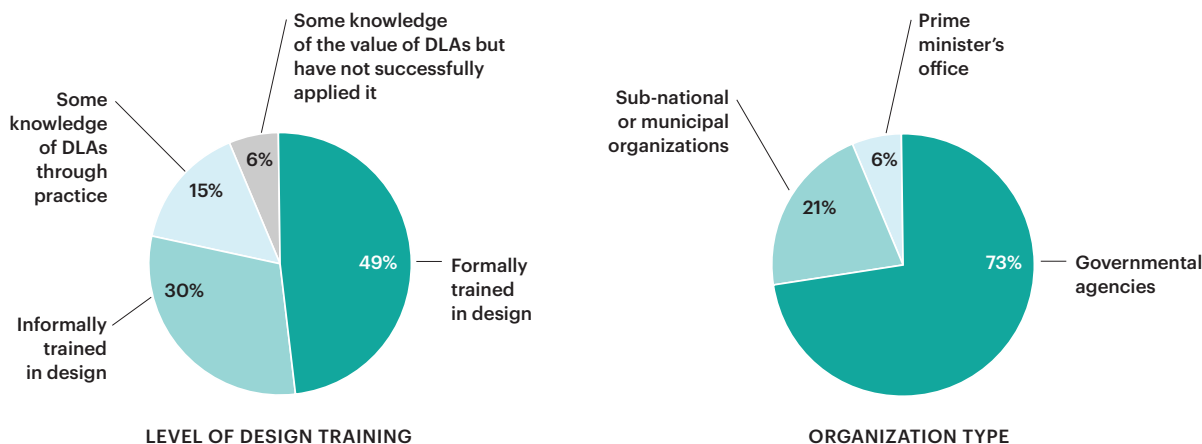
3.4 RESPONDENTS' PROFILE

The questionnaire captured the views of a particular group of civil servants in the Julkis-muotoilijat community. Below details about the respondents' profile are shared, in terms of their level of design training, type of organization they work in, and the location and integration of design in their organization.

3.4.1 Level of design training and organization type

Almost half of the respondents reported having received formal training in DLAs by degree granting institutions, whereas 45% reported having received informal training (through workshops, trainings, and development courses). Additionally, 15% reported having some knowledge of DLAs acquired through practical application. Six percent reported that they know about the value of DLAs but have not been successful in applying it. In the Results chapter, these four levels of knowledge are differentiated as civil servant with formal design training, informal design training, some knowledge of DLAs, and knowledge of the value of DLAs, respectively.

FIGURE 6: The breakdown of respondents in terms of their level of design training and type of organization.



Respondents were also asked about the type of organization they work in. Seventy-three percent of the respondents reported working in governmental agencies, 21% in sub-national or municipal organizations and 6% in the prime minister's office (see Figure 6). None of the respondents indicated that they work in state ministries, or that they do not work for any of the above-listed institutions. Initially, the questionnaire differentiated between "government organization" and "public sector agency, state-owned agency, or quasi-public sector organization." These two categories were meant to refer to the same type of institution, best described as a governmental agency, which are institutions that report to state ministries. Therefore, for clarity, the responses to these two categories were combined as a corrective measure.

3.4.2 Position of DLAs within the organizations

The questionnaire inquired into the location and integration of design-led approaches within the respondents' organizations. A majority of the respondents (61%) have stated that design-led approaches are a part of their organization; they are applied to specified and limited areas and functions. Approximately a third of respondents (30%) have said that design-led approaches are an external resource; design-led expertise is not a function in their organization. 6% of respondents have reported that design-led approaches are central to their organization's efforts, and this expertise serves as a resource to various organizations. None of the respondents reported that design-led approaches are integrated at the highest levels of their organization. Three percent chose "other" as their answer. These responses indicate that most respondents have DLAs as part of their organization, but none of the participants assessed their organization as having reached the highest level of integration of design (see Figure 7). Sabine Junginger's (2009) model, which outlines four archetypes for the integration of design thinking into an organization's function (read more about Junginger's framework on page 20) helps interpret these results. Over 90% of the respondents chose an answer which is closest to the "separate" or "peripheral" archetype.

FIGURE 7: The position of DLAs in respondents' organization, interpreted with the Junginger (2009) design integration model.

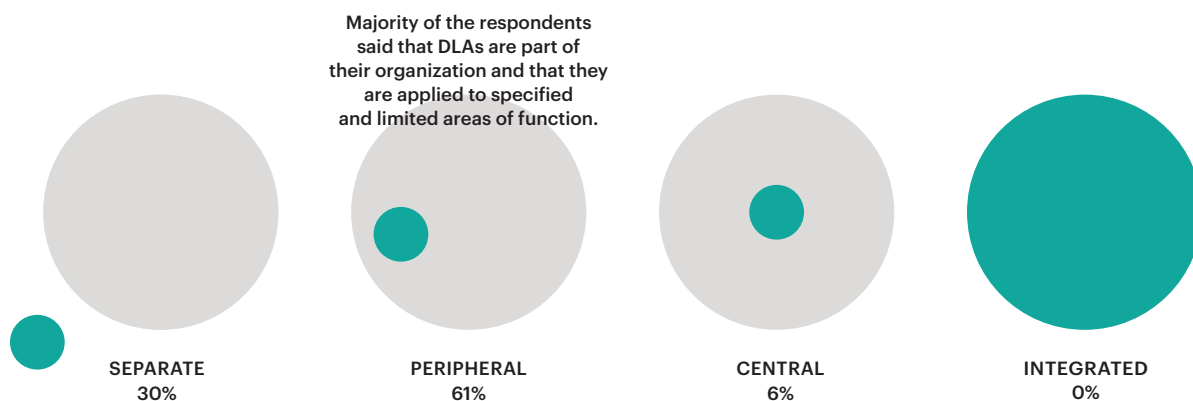
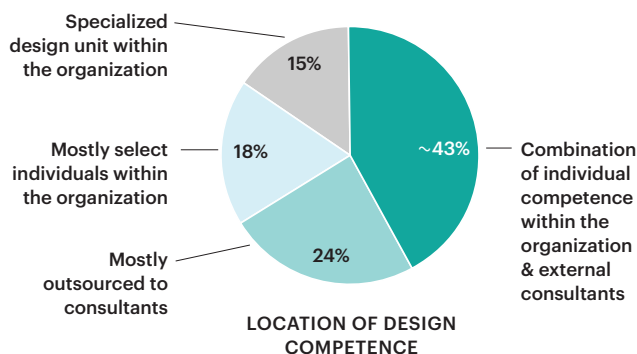


Figure 8: The location of design competencies in respondents' organization.



Respondents also reported on the location of design competencies within their organization. Most popularly, design competencies were a combination of individual skills/competencies and external consultants (at ~43%); the second most popular arrangement (at 24%) was mostly purchasing/out-sourcing DLAs to consultants. Almost a fifth of respondents indicated that design competence is located mostly within select individuals across different department units. Only 15% indicated having a particular unit for DLAs in their organization (see Figure 8). In line with observations outlined in Introducing DLAs into public sector organizations, outsourcing DLAs still seem to be a popular option for the surveyed organizations, with an increasing number of individuals with design competences within the organization. At a later point in the questionnaire, over 60% of respondents agreed or strongly agreed that their organization could procure support staff with specialized design-related expertise.

These results indicate, that at least in the surveyed group, DLAs were not fully integrated into the organizations and in most cases could be best described as being separate or peripheral to the organization. Additionally, respondents indicated that design-related competencies were most commonly held by a combination of individuals within the organization and external consultants.

FIGURE 9: The analysis process took place in two distinct phases.

STAGE 1



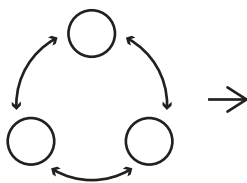
Responses to each question were first analyzed individually

3.5 DATA ANALYSIS

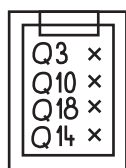
As described in the Research context section on page 40, the survey was the result of the work of multiple actors, approaching DLAs through differing research topics. Additionally, due to time constraints I proceeded with the literature review and data collection simultaneously. Design capability as an analytical lens has emerged in parallel to data collection and literature review. Due to this process, one of the research constraints was that the survey was not primarily created with the Malmberg (2017) Design Capability Framework in mind.

The process of analysis followed two stages, as illustrated in Figure 9. In stage one, the primary focus was to analyze responses to each question individually. The resulting analysis was used as a starting point for incorporating findings from the survey into Le's research (see more in Research context section on page 40). In stage two, the results were examined through the lens of the Design Capability Framework (Malmberg, 2017). Some questions were

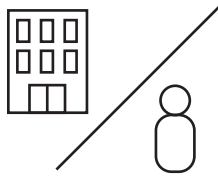
STAGE 2



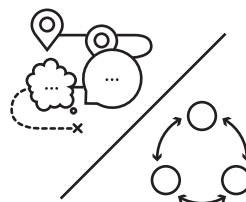
Results and questions were examined in relation to the Design Capability Framework and its three dimensions



Four questions were eliminated



Responses were sorted into either reflections on the respondents' organizational realities, or general personal reflections



Results were organized & analyzed as they pertain to awareness of design or challenges related to all three dimensions of design capability

eliminated, and the rest were identified as either a reflection about the respondents' organizational realities or general personal reflections about DLAs. This differentiation seemed necessary because questions falling into these two categories prompted significantly different reflections from the respondents in terms of specificity. The questions inquiring about organizational realities shed light on the perceived conditions within the organization; the other questions helped uncover the respondents' general attitude and perception of DLAs. Mixing these two different kinds of reflections during analysis would have made it difficult to interpret the results meaningfully. In the following section I elaborate in more detail on the two stages of analysis.

3.5.1 Stage 1 — overview of all responses

In the first stage of the analysis, the answers to open-ended and closed-ended questions have been analyzed differently. The closed-ended questions have been analyzed by identifying the highest and lowest degrees of agreement or disagreement with posed statements. Then, data for each organization type was examined separately as well as all of the responses together. The "other" answers were analyzed as they related to the posed statements, and if unrelated, new themes were formed.

The responses to open-ended questions have been analyzed using the affinity mapping technique (Hanington & Martin, 2012; Kuniavsky, 2003; Lucero, 2015). First, the analysis started with examining responses to each question separately and by organizing the responses into preliminary topics. Second, the topics were refined, given headlines, and sorted into larger thematic clusters. Third, the larger thematic clusters were given headlines to represent a specific area of finding, corresponding to the posed survey question. Lastly, each response was associated with the respondents' organizational type and the level of design training. The data were reviewed to identify possible patterns relating to these features of the respondents. Because respondents were unevenly distributed within the identified groups (i.e., type of organization, or level of design training), it was not possible to derive substantiated conclusions from these variables. Therefore, the Results chapter does not strongly emphasize these characteristics. The above described process was documented by recording the topics, themes, and supporting evidence into excel sheets (see Appendix F for examples). The records were revisited multiple times to check for the validity of the interpretations. This initial stage of data analysis was conducted in close collaboration with Laura Lerkkanen, whose Master's thesis focused on the role of design leadership in governmental organizations (Lerkkanen, 2019). The analysis sessions were face-to-face, with documentation tasks divided evenly between us.

3.5.2 Stage 2 — review of the questionnaire according to the Design Capability Framework

I carried out the second stage of the data analysis independently. The second stage included evaluating the relevance of each survey question to the Malmberg Design Capability Framework (2017) and the research objectives. Based on these criteria, four questions were excluded from the analysis (see Table 2). Specifically, questions 3, 10, and 18 were outside the scope of this thesis. Despite prior testing, question 14 proved to be too ambiguous, and this compromised the quality of responses to that particular question, and therefore was also excluded from the analysis.

The remaining 14 questions and the corresponding responses fell into three main topics: 1) questions related to the respondents' and organizations' profile; 2) questions related to the contributions of DLAs; and 3) challenges related to the introduction and application of DLAs. Different aspects of the Malmberg Design Capability Framework (2017) were relevant to the responses in the latter two categories. Responses in the second category related to

TABLE 2: Survey questions were sorted and grouped according to personal or organizational reflections, and if they related to the understanding and use of DLAs or the challenges related to the introduction and use of DLAs.

the awareness dimension of the Design Capability Framework (Malmberg, 2017). The third category of responses (e.g., challenges) touched on all three dimensions of design capability outlined by Malmberg (2017). The results were additionally sorted based on whether they inquired into the individuals' general perception of DLAs, or if they probed into aspects of DLAs within the respondents' organization. This differentiation was deemed necessary as a condition for meaningful interpretations of the results. Table 2 showcases the sorting of questions outlined above.

QUESTIONS ABOUT RESPONDENTS' AND ORGANIZATIONS' PROFILE	QUESTIONS ABOUT PERSONAL PERCEPTIONS OF DLAs	QUESTIONS ABOUT EXPERIENCES WITHIN THE ORGANIZATION	ELIMINATED QUESTIONS
Q1 – Closed Level of design training and knowledge Q2 – Closed Organization type Q5 – Closed Location of design competences in the organization Q6 – Closed Positioning of DLAs in the organization	Contribution of DLAs and what DLAs are Q4 – Closed Core benefit of DLAs Q8 – Closed Core values of DLAs Q12 – Open Characterization of DLAs in three words Q11 – Open Justification of DLAs to decision makers <hr/> Challenges related to the introduction of DLAs Q15 – Open Major risks and pitfalls to introducing DLAs	Current use of DLAs Q7 – Open Core function and objective of DLAs in the organization Q13 – Open Examples of use of DLAs in the organization Q9 – Closed Support of DLAs in the organization <hr/> Challenges related to the use of DLAs Q9 – Closed Support of DLAs in the organization Q16 – Closed Resistance & reluctance experienced towards DLAs in the organization Q17 – Closed Challenges with DLAs in the organization	Q3 Why are DLAs more observable Q10 Level of knowledge exchange Q14 What surprised you about the use of DLAs Q18 How to improve the effectiveness of DLAs

After the above categories were established, the affinity mapping technique (Hanington & Martin, 2012; Kuniavsky, 2003; Lucero, 2015) was used to identify major themes within the responses according to the categories described, which were articulated in the form of headlines presented in the Results chapter next. Responses relating to the respondents' and organizations' profile did not require affinity diagramming, and were presented in Respondents' profile section on page 44.

In this thesis, the Design Capability Framework by Malmberg (2017) plays an important role in helping to reflect the perspective of design-minded civil servants from a more systemic point of view. It also assists in considering the broader organizational conditions at play, which may very well influence individuals' ability to apply design-led approaches. The primary function of the framework was to serve as a lens through which to interpret the findings and help organize the results.

4.

Results

The results of the thesis are organized to answer the research questions set out in the Research objectives chapter, namely:

- 1) What are the perceived contributions, examples of the current and potential use of design-led approaches within some Finnish public sector organizations as reported by design-minded civil servants working in them?
- 2) What are the challenges to the introduction and use of design-led approaches as reflected by design-minded civil servants working within public sector organizations?

The results are considered with the assistance of the Design Capability Framework (Malmberg, 2017), outlined in detail starting on page 24. The framework and its three dimensions are used as a way to organize and make sense of the questionnaire results. The first research question reflects on aspects related to the awareness dimension of design capability, whereas the second question investigates the challenges related to all three dimensions of design capability.

4.1 CONTRIBUTIONS, EXAMPLES OF CURRENT AND POTENTIAL USE OF DLAs

In this section of the findings, results related to the perception of general contributions of DLAs in the public sector are presented first. Second, responses related to examples of current use and function within the respondents' organizations are presented. Lastly, the section showcases answers related to the potential contribution of DLAs. These results relate closely to the awareness of design in Malmberg's Design Capability Framework (2017). The awareness dimension of design capability includes the understanding and use of design, the perception of the potential contribution of design-led approaches, as well as the current use of design within the organization. The survey did not inquire about the respondents' understanding of how to use design-led approaches.

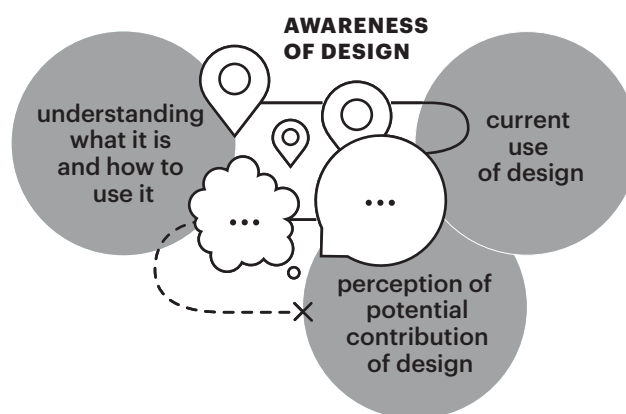
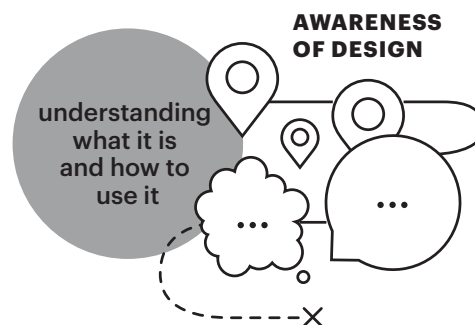


FIGURE 10: Elements of the awareness of design from the Design Capability Framework (Malmberg, 2017) is pictured above, as the results in this first section are closely related to it.

4.1.1 Individuals' perception of the contribution of DLAs



Bringing more inclusive and end-user views inside the government seems to be the most emphasized benefit of DLAs

Throughout the survey, respondents emphasized that bringing end-user/citizen/stakeholder perspectives into the government is currently the most crucial contribution of DLAs in the public sector context. It was selected as the most important benefit by 42% of the respondents. Additionally, all respondents have agreed that bringing end-user/citizen/stakeholder perspectives into the government is one of its values. When asked to choose words to characterize DLAs, the most commonly ones were “human-centric” and related terms (e.g., customer experience, customer-oriented, user-centricity). This trend was reflected in how respondents justified the resources needed for DLAs to decision makers. They heavily emphasized the ability of DLAs to increase customer satisfaction by answering to the users’ needs, through accessibility and usability, for example, and linked it to potential cost saving.

CIVIL SERVANT WITH
INFORMAL DESIGN TRAINING

“The value of design thinking is in (...) ensuring we’re better at doing what our service users and stakeholders need us to do and we save money by using these methods, too.”

CIVIL SERVANT WITH
INFORMAL DESIGN TRAINING

“In the long run it will save money as the services will be better suited for users and organised more efficiently.”

DLAs are seen to aid in rethinking and transforming governmental organizations

Rethinking how government works was identified as the second core benefit of DLAs. Additionally, 95% agreed or completely agreed that one of the values of DLAs is to rethink government processes, systems and structures. Over 90% agreed or strongly agreed that another core value of DLAs is to help transform the way government works. However, over 10% disagreed or completely disagreed that the transformative aspect is a value of DLAs.

When asked about how they would justify the resources needed for DLAs, respondents highlighted DLAs ability to support internal functions. They mentioned DLAs ability to help reorient and transform the organization, improve internal processes, and to increase employee satisfaction.

CIVIL SERVANT WITH
FORMAL DESIGN TRAINING

“A better understanding of design would promote making our organization more efficient and help us renew ourselves in the middle of the current organizational turbulence.”

DLAs are perceived to assist in building bridges and collaborating across silos

A fifth of the respondents had thought building bridges across the bureaucratic and disciplinary silos was the core benefit of DLAs, making it the third most emphasized aspect of DLAs. Additionally, 95% agreed or completely agreed that building bridges across the bureaucratic and disciplinary silos is one of the values of DLAs. When asked to characterize DLAs with a few words, respondents often described DLAs as collaborative (e.g., co-creation, co-designing, participatory). Additionally, some respondents argued that DLAs are a beneficial approach for better problem-solving through cross-sectoral collaboration.

CIVIL SERVANT WITH
FORMAL DESIGN TRAINING

“I would emphasize that design helps with bringing people from different functions together (co-creation) and solving problems more effectively and transparently as these people bring many ‘wise heads together’ and share knowledge openly. This, then, leads to more efficient solution-finding and is essentially more efficient use of resources.”

The ability to bring creativity and imagination was one of the values of DLAs but was not seen as the core benefit of DLAs in the public sector

A few respondents described DLAs as inspiring and creative when asked to choose a word to characterize them. Additionally, 85% of respondents have expressed that bringing imagination and creativity inside the bureaucracy to address society’s biggest challenges is one of the values of DLAs. However, interestingly, 15% disagreed or completely disagreed with this statement. Furthermore, when asked to choose the core benefit of DLAs, none of the respondents selected creativity and imagination to solve grand societal challenges as their top choice.

DLAs were referred to as future-oriented and holistic

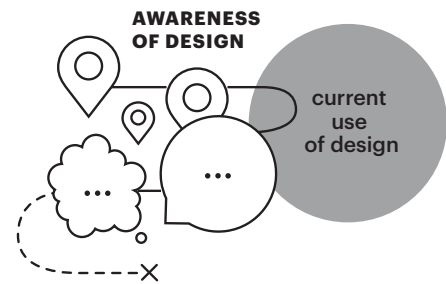
There were a few references to DLAs as something future-oriented and encompassing (i.e., systemic, holistic). When asked for how respondents would justify costs of DLAs to decision-makers, the second most popular argument included a reference to DLAs’ ability to help the organization stay relevant in the future and “future proof” their success.

CIVIL SERVANT WITH
FORMAL DESIGN TRAINING

“Stronger in-house design capacity is the only way of making sure that we can future-proof our organizations operation and stay relevant to our customers and owners.”

In their reflections on the values and benefits of DLAs, respondents mostly echoed well-known aspects of DLAs, such as the ability of DLAs to enable collaboration and bring end-user views inside the organization. The differences in how much each benefit of DLAs was emphasized did not vary drastically. However, it was clear that most respondents agreed on the value of DLAs to bring end-user and stakeholder views inside the government, and it was the highest-ranked benefit of DLAs. One interesting finding may be that none of the respondents perceived the creative and imaginative aspect of DLAs as a critical contribution in the governmental context.

4.1.2 Examples of organizations' current use and function of DLAs



Respondents also provided examples of what they designed using DLAs in their organization and what function DLAs help to fulfill, relating to the “current use” in Malmberg’s Design Capability Framework (2017). Over 70% indicated that their organization accumulated experiences with design-led approaches, indicating that the respondents’ organizations are increasingly using DLAs in their operations.

DLAs are mostly used for digital platform/service development

A large portion of the respondents reported that the core function of DLAs in their organization is to develop services. They especially emphasized using DLAs in digital service development within IT and using UX design to deliver better experiences. Additionally, the most frequently given example of what they have designed using DLAs were digital applications and platforms. A few respondents described the core functions of DLAs as enabling digital transformation. DLAs were also reported to assist with rethinking public services. However, a small number of respondents indicated that there is room for improvement in how DLAs are utilized in digital service development. DLAs seem to be used only in specific projects, and few reported that the development of physical services is outsourced to design consultants.

CIVIL SERVANT WITH
INFORMAL DESIGN TRAINING

“Design-led approaches help us to develop better digital services based on user needs.”

CIVIL SERVANT WITH
FORMAL DESIGN TRAINING

“Design-led approaches are currently focused on developing customer experience in digital services. Designers work on external devops [development operations] team, bringing cx [customer experience] in digital service design and development.”

CIVIL SERVANT WITH
INFORMAL DESIGN TRAINING

“We use it mainly to develop better customer experience”

DLAs help bring end-user perspectives into organizations

Many respondents reported that DLAs enable better customer-centricity and experience in their organizations. Respondents further emphasized that their organization uses DLAs to consider end-user views. They also use it to increase the accessibility and usability of services. The language with which this customer-centricity described varied significantly, and included references to “end user view, service users, end-users, customer-orientation, user perspectives, user voice, customer centricity.”

CIVIL SERVANTS WITH
FORMAL DESIGN TRAINING

“They help to bring the user perspectives in to the projects and functions.”

“Bringing the end user view to the centre of every project.”

DLAs are used for enhancing communication

The second most commonly mentioned example was using DLAs for enhancing verbal and visual communication, for presentations and way-finding, for example.

CIVIL SERVANT WITH
FORMAL DESIGN TRAINING

“[We use DLA for] discussions and presentations”

DLAs are used in relation to strategy, but the extent to which they are used for this purpose remains unclear

There were contradicting accounts of how DLAs are used in relation to strategy development. When respondents reflected on the core objective or function DLAs play in their organization, a few respondents mentioned that DLAs were already utilized for strategy-related work, and some pointed out that DLAs are not yet utilized for this purpose. When providing examples, however, some respondents reported to use DLAs related to strategy (e.g., IT-strategy, organizational strategy) and to design strategy planning tools.

CIVIL SERVANT WITH
SOME KNOWLEDGE OF DLAS

“Design is still seen as a way of prototyping and testing (...), but the more strategic level of design is still missing.”

CIVIL SERVANT WITH
INFORMAL DESIGN TRAINING

“We have also used design-led approaches in thinking of new strategy but I hope that it will also be used in implementing the complex strategical problems.”

DLAs are used by a few to develop policies

A few respondents indicated that DLAs play a role in the development of policies, reporting to use DLAs for “creat[ing] humane policies” and emphasizing the role of DLAs in engaging a broader set of expertise to develop “better policies.”

DLAs are used to break silos and enhance collaboration which is said to result in better problem solving

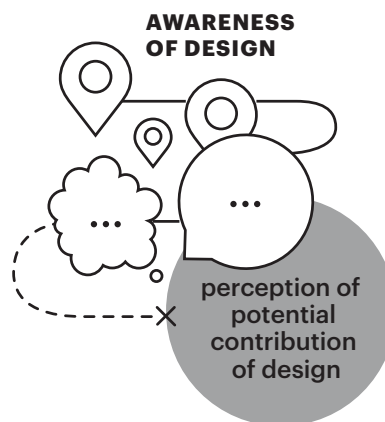
A few respondents recounted using DLAs for enhancing collaboration and building bridges when reflecting on the core function of DLAs in their organization. A few respondents wrote about how DLAs are helping their organization break silos and solve wicked problems through engaging a wider range of expertise. DLAs are also reported to be useful in facilitating stakeholder involvement and understanding.

CIVIL SERVANT WITH
FORMAL DESIGN TRAINING

“[We use DLAs to design] processes, and even more often ways how to build bridges between people.”

The above findings point to a wide range of applications and purposes of DLAs within the respondents' organizations, varying from UX design to strategy and policy-related work. However, by far the most mentioned examples were related to developing digital services, and visualization was the second most mentioned application of DLAs. This indicated that the respondents' organizations are likely at different levels of design maturity. However, the strong emphasis on digital service development points to a commonality amongst the respondents' organizations. Strategy and policy-related application of DLAs was reported only by a small number of respondents. It is not entirely clear how respondents use DLAs in relation to strategy.

4.1.3 Perception of potential contribution of DLAs



The potential of DLAs to enable organizational transformation was identified but was not reported to be successfully contributing to it

Few respondents indicated that there is a potential to use DLAs for organizational transformation but they expressed that this is not necessarily being applied in practice.

CIVIL SERVANTS WITH
FORMAL DESIGN TRAINING

“In theory, they should support and drive organizational transformation. In practice, they’re mostly applied in specific projects only.”

“Unfortunately in our sector design is understood only as a means to understand users/stakeholders. It’s values for rethinking our own activities is yet to be recognised”

DLAs are seen to have the potential to be used for strategy-related work

A few respondents expressed wanting to utilize DLAs on a larger scale. This indicates that DLAs may be seen as something with a potential for strategy-related application. However, as mentioned earlier, respondents described the relation between DLAs and strategy in an unclear manner.

CIVIL SERVANT WITH
FORMAL DESIGN TRAINING

“I myself teach service design to our client organizations and work in bigger and smaller projects as a design expert and through that role try to advance understanding of the approach on different levels of the organization. It all sounds really nice on paper but due to lack of resources and clear goals, my role is quite ambiguous and loose, and I long for a more strategic approach on design.”

A small number of respondents reflected on the potential, but perhaps not yet realized contribution of DLAs. Respondents explicitly mentioned the unrealized potential of DLAs in helping transform the organization, as well as some respondents expressed a wish to be using DLAs in more strategic levels.

4.1.4 Summary: Contributions, examples of current and potential use of design-led approaches

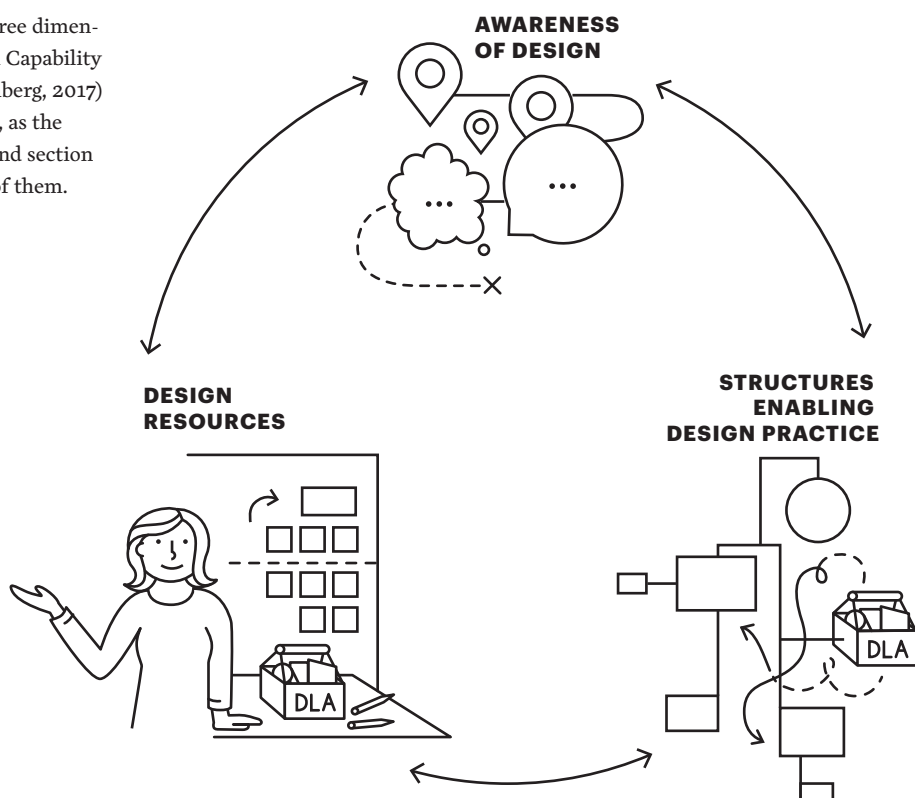
When the respondents' personal and organizational reflections are examined together, some commonalities emerge. Individual respondents perceived the ability of DLAs to bring end-user views inside the government to be most important. This aspect was also strongly emphasized in how respondents reported on the use of design within their organization. Additionally, the ability of DLAs to help build bridges and collaborate across silos was emphasized by both individual reflections and the way respondents described the core use of DLAs in their organization.

There were also significant differences between the two accounts of the respondents. For example, most of the respondents agreed or strongly agreed that DLAs help rethink and transform the way government works. However, when reflecting on the use of design in their organizations, respondents reported potential for this application, but that it is not necessarily actualized. There were fewer examples of DLAs applied to strategy, policy, and transformation, even though some respondents see the potential for its application related to strategy and transformation.

4.2 CHALLENGES TO THE INTRODUCTION AND USE OF DLAs

Throughout the survey, respondents shared many challenges related to their work in applying design-led approaches, as well as their views on the risk and pitfalls of introducing DLAs. The challenges they shared relate to Malmberg's three dimensions of design capability (2017), touching on awareness of design, design resources, and structures enabling the design practice. In this section, results related to individual reflections on the risks and pitfalls of introducing DLAs are shared. In the second part, the experiences of respondents relating to challenges in their organizations are summarized.

FIGURE 11: The three dimensions of the Design Capability Framework (Malmberg, 2017) are pictured below, as the results in this second section relate to all three of them.



4.2.1 Individuals' perception of risks and pitfalls of introducing DLAs

This section summarizes the personal perspectives of the respondents on the risks and pitfalls of introduction DLAs in an organization. Their views are organized to reflect the three dimensions of the Design Capability Framework (2017), namely awareness of design, design resources, and structures enabling the use of design.



Challenges related to awareness of design

Here respondents mostly shared their concerns relating to the understanding of DLAs and how to use it within their organizations.

DLAs may be perceived as either a savior or a superficial fix

Many respondents perceived the superficial application and perception of DLAs as a pitfall or a threat. They seemed concerned about the use of DLAs as a “quick fix” or as a “tick box exercise” and not being utilized at a higher strategic level. Others spoke of DLAs as something applied only for the sake of image and reduced to a buzzword. On the other hand, respondents were concerned about an inflated perception or expectation of DLAs where it might be perceived as “God-like” and as a “panacea.”

CIVIL SERVANTS WITH
FORMAL DESIGN TRAINING

“‘green-washing’, i.e., service design is only done as a ‘tick-box’ exercise and the organization and its leaders are not committed to get involved or carry the results to implementation.”

“Marketing DLA as a solution for all / ‘all-saving solution’ ”

CIVIL SERVANTS WITH
INFORMAL DESIGN TRAINING

“Thinking that it [DLA] is panacea.”

“[DLAs are] used to validate something we already know.”

DLAs may be insufficiently understood

Another significant concern emerged about the lack of understanding of DLAs — what they are, their value, about the process and methods, and what is required for their use. Some spoke about DLAs being misunderstood.

CIVIL SERVANTS WITH
FORMAL DESIGN TRAINING

“I see that people just adopt some catch-phrases here and there and then talk about design without really understanding what they are talking about.”

“We take it as a ‘God’ that comes and saves us, and don’t understand that it is often a rocky road — it is not easy and fast, it requires educated people, time and resources.”



CIVIL SERVANT WITH
INFORMAL DESIGN TRAINING

Challenges related to design resources

Respondents mostly emphasized human-resources in this reflection.

DLAs may not be supported with sufficient resources

This included concerns about a lack of resources such as time and personnel in the use of design-led approaches.

“Lack of resources is the biggest risk — both time and people. A design-led approach needs time.”



CIVIL SERVANT WITH
SOME KNOWLEDGE OF DLAS

Challenges related to structures enabling design

Respondents reported challenges relating to the organizational acceptance, integration, and assimilation of design-led approaches. Reports on challenges related to implementation and tolerance for failure can be related to missing structures, routines and processes enabling the use of design, or lack of design management capability.

DLAs may not be sufficiently integrated and may be used aimlessly

Respondents seemed concerned that DLAs are not integrated into the development process. Some mentioned the lack of clear vision and goals and lack of committed leadership as a pitfall.

“Not including it properly and fully into business and service development, not working together i.e., with business and tech properly but remaining as an after-thought or quick fix only.”

CIVIL SERVANT WITH
FORMAL DESIGN TRAINING

“If it’s done without clear goals and vision, it might remain non-effective and a waste of time”

DLAs may face significant hurdles in the implementation phase

Another concern mentioned by a few participants was about the difficulties implementing DLAs solutions, namely an inability to implement solutions and lack of leadership/ownership at the implementation stage.

CIVIL SERVANTS WITH
FORMAL DESIGN TRAINING

“Customer research is done but there is no courage to actually base new ideas and work on it.”

“Leaders are not committed to get involved or carry the results to implementation.”

CIVIL SERVANT WITH
SOME KNOWLEDGE OF DLAS

“There aren’t resources or willingness to execute the best models/solutions that are explored and introduced on the way.”

DLAs may be dismissed in case of a single instance of failure

A few respondents mentioned that there is a risk that DLAs are given only one chance to impress, and failure means that DLAs loses credibility quickly.

CIVIL SERVANT WITH
KNOWLEDGE OF THE VALUE
OF DLAS

“If one project using this approach fails, [DLA] loses all the credibility.”

Summary of individuals' perception of risks or pitfalls of introducing DLAs

In their reflections about the peril of introducing DLAs, respondents most heavily emphasized their concern about the awareness dimension of design capability. They especially highlighted a concern about the contradictory and inaccurate understanding of DLAs, such as the perception of DLAs as a savior or a being applied only in a superficial manner. The second most emphasized challenge related to the structural dimension of design capability, where respondents reflected on potentially poor integration of DLAs and difficulties with implementing solutions derived from DLAs. They emphasized concerns about an aimless and unsupported utilization of DLAs.

4.2.2 Challenges related to the use of design-led approaches in respondents' organizations

Respondents were also prompted to reflect on the challenges they have observed within their organizations. In this following section, the most emphasized hurdles are presented, as related to the three dimensions of design capability, namely awareness of design, design resources, and structures enabling the use of design (Malmberg, 2017).



Challenges related to awareness of design

Here respondents emphasized challenges related to the understanding of DLAs within their organizations as well as how to use them. Additionally, some reported challenges relating to the perception of the potential contribution of DLAs.

DLAs are not well understood within the organization and often require constant justification

A significant number of respondents indicated that a lack of understanding of DLAs in their organization presented a barrier. For example, over 80% agreed or strongly agreed that general resistance and confusion around “design” meanings and values present a challenge in their organization. Some respondents elaborated on this, sharing that the value of DLAs is not clearly understood and that people within their organization do not know how to use this approach, or how it could be practically applied in their specific context. Almost 70% agreed or strongly agreed that there is a constant need to justify design-led approaches, which is not surprising, in light of the above observations on the lack of understanding of DLAs.

CIVIL SERVANT WITH
INFORMAL DESIGN TRAINING

“Not really understanding the power of design-led approaches in solving complex problems. Really understanding service design only as business-operations, not as serving people.”

The user-centered aspect of DLAs is not universally viewed as a necessity

Additionally, over 50% indicated having experienced resistance through others not seeing the benefit of taking a user-centered perspective, indicating that this particular aspect of DLAs may not be universally perceived as valuable. Respondents added that sometimes there is a perception in their organization

that user-centered development is already being practiced, thereby questioning the need for using DLAs.

CIVIL SERVANT WITH
INFORMAL DESIGN TRAINING

“Those who have been developing digital services for many years think that they are already doing user-centered developing. But they are not, they are not really collecting user data or analysing it during the development project. For them ‘service design’ feels like a new trendy word, nothing else. We need to communicate more clearly what this approach means.”

CIVIL SERVANT WITH
FORMAL DESIGN TRAINING

“Also ‘we know our customers already’ is very familiar.”

There are communication difficulties around various aspects of DLAs

Connected to the lack of understanding of DLAs, the participants’ responses also pointed towards a communication problem around DLAs. Over 60% indicated that they experienced resistance or reluctance to DLAs through ineffective communication; lack of understanding around design approaches more generally, and over 80% agreed or strongly agreed to face challenges around communicating costs, benefits, and how to evaluate outcomes of DLAs.



Challenges related to design resources

Here both human and non-human resources were highlighted by respondents, with a slight emphasis on human resources.

There is a lack of money, space and personnel to practice design work

About half of the respondents reported facing challenges in their work in the form of lacking resources. The resources cited by respondents included monetary restrictions, lacking the right kind of space to practice design work, as well as the lack of trained personnel and time restrictions. For example, over half of the respondents disagreed or strongly disagreed when asked if their organization has sufficient access to space (including rooms and equipment) required for design-led activities. Half have also disagreed that they have the ability to create (or customize) their designerly models, tools, and techniques, which may be related to the lack of allocated resources.

CIVIL SERVANTS WITH
INFORMAL DESIGN TRAINING

“Not having time for it; not getting the right resource (DLA service provider) in the narrow time window at hand.”

“[I haven’t experienced] any resistance really but lack of resources is a challenge”

CIVIL SERVANT WITH
FORMAL DESIGN TRAINING

“Lack of budget directed to practicing design [is a challenge].”



Challenges related to structures enabling design

Respondents reported challenges relating to organizational acceptance, integration, and assimilation of design. Additionally, there were mentions of structure, routine, and process-related challenges. Cultural challenges, although not explicitly named as part of the Design Capability Framework, were also reported.

There is a lack of discussion and reflection about the use of DLAs

Lack of reflection about DLAs seems to be prevalent. 65% disagreed or strongly disagreed that their organization intentionally discusses and reflects upon their design-led work in order to improve future efforts.

There is a lack of leadership and integration to higher levels

Over 80% agreed that a challenge they face is lack of leadership and an authorizing environment. Further, 85% of respondents disagreed or strongly disagreed when asked if their organization integrated design-led approaches into their strategic plan, indicating that there is a lack of integration of DLAs to higher levels in the organization in most of the respondents' organizations.

There are various cultural challenges within the organizations preventing the use of DLAs

Respondents highlighted the cultural barriers within the organizations which present challenges to their work. For example, a few respondents spoke about how adherence to the law is used to justify not trying other approaches or exploring alternative options offered by DLAs. Others described an environment where expert knowledge is valued and prioritized over other kinds of knowledge.

CIVIL SERVANTS WITH
FORMAL DESIGN TRAINING

"The organizational culture doesn't support DLA-thinking. In theory it is favoured, but it is difficult to implement in practice."

"Law, law, law: we would like to...but the law prevents us. This is the most typical excuse for not even trying to imagine another solution."

CIVIL SERVANT WITH
INFORMAL DESIGN TRAINING

"Arrogance, bottom up is worthless in comparison to 'real expertise,' top down does the trick. An illusion that experts already 'know what is needed.'"

Summary: challenges related to the use of design-led approaches in the respondents' organizations

In their reflection on the challenges in their organizations, respondents recounted barriers related to all three dimensions of design capability. Respondents especially highlighted barriers related to awareness of design. They recounted, for example, resistance and confusion around "design" meanings and values, and whether DLAs are a necessity. The second most emphasized barriers were related to structures enabling the use of design. A large percentage of respondents agreed that there is a lack of integration of design to the highest levels of the organization and leadership is lacking. Cultural challenges were pronounced in the responses, such as arguing adherence to the law as a defense to not utilizing other approaches, including DLAs. Respondents shared concern for a lack of design-related resources including money, space, and personnel to practice design work. However, these aspects were perhaps slightly less emphasized than the other two dimensions of design capability.

Summary of challenges to the introduction and use of design-led approaches

A similar pattern of concern can be observed in how respondents reflected on the risks of introducing DLAs into an organization and the current barriers they reported in their organization. The emphasis heavily fell on barriers related to the awareness of design and structural support of design. Barriers related to design resources were mentioned in both accounts, but perhaps not as prominently emphasized.

Awareness of design was overall described as lacking, low and misunderstood, and design-minded civil servants reported to have a hard time communicating the values and meanings of DLAs. Design-led approaches were reported to require constant justification by a number of respondents. Regarding lack of resources for the use of design, both the individual and organizational

reflections were similar, mostly emphasizing personnel and budgetary restrictions. The lack of time and suitable spaces were also mentioned as concerns. In terms of the structural barriers related to the use of DLAs, respondents highlighted the current difficulties of integrating DLAs into processes and higher levels within the organization and a lack of committed leadership around DLAs. Respondents also highlighted the lack of reflection about the use of DLAs, as well as significant cultural challenges in applying them. Respondents appeared concerned about the difficulties encountered in the implementation phase and the consequences of failure when applying DLAs.

In this section, responses were analyzed and organized into categories inspired by Malmberg's Design Capability Framework (2017), in order to make sense of the results. Individuals' general reflections and reflections on organizational conditions were additionally differentiated. In the findings, the first section examined the respondents' understanding of DLAs, paying attention to their individual perceptions of the contribution of DLAs as well as reflecting on the use and function of DLAs within their organization. Additionally, their perceptions of the potential contribution of DLAs were examined. In the second section, the three dimensions of design capability were used to order the reported challenges, both on the introduction of design-led approaches and the ones experienced by the respondents in their organization. In the Discussion chapter all the results are considered together along with the Background chapter of the thesis.

5.

Discussion

In this chapter, I reflect on the results and consider the limitations and validity of this thesis. Lastly, potential areas for further research are explored.

5.1 REFLECTION ON THE RESULTS

This thesis sought to take a modest first step in examining a part of the current landscape in which design-led approaches are applied in Finnish governmental organizations. The empirical part of the study solicited the views of design-minded civil servants with a membership of *Julkis-muotoilijat* community in relation to the application, perceptions, and challenges of DLAs. Due to the sample of the survey, the views of civil servants working in Finnish governmental agencies as well those with formal training were most represented. The results of the survey were interpreted with the assistance of the Design Capability Framework (Malmberg, 2017). The following reflection first remarks on the results related to the perceived contributions, utilization, and potential of design-led approaches. Second, this section reflects on the challenges reported and the positioning of DLAs within organizations. Lastly, the findings are summarized, and implications for practitioners and researchers are explored.

The way respondents reflected on the benefits and current applications of DLAs mirrored some of the claims introduced in the Background chapter. The most pronounced benefit of DLAs was their ability to bring end-user views inside the public sector, complemented by their benefit in enabling collaboration and building bridges across silos. Respondents echoed this when reflecting on the function and application of DLAs within their organizations. While the range of reported utilization of DLAs varied greatly, there was a clear and strong emphasis on digital service development. The design-minded civil servants surveyed did recognize the value of more advanced applications, such as the integration and use of DLAs for strategy and policy-related matters, and enabling organizational transformation. However, in the surveyed group, these applications remain mostly aspirational and limited.

The respondents reported a large number of challenges related to the introduction and application of DLAs in their organization. They reported experiencing challenges, such as cultural push back (Bason, 2014) and recounted “epistemological tensions” (McGann et al., 2018, p. 264). However, with the assistance of the Design Capability Framework (Malmberg, 2017), it became clear that respondents reported challenges related to awareness (i.e., understanding of design) and structural barriers (i.e., integration of design) as particularly acute in their organizations. The latter observation is especially important, as omitting the changes that the application of DLAs requires within a public sector organization may result in their outright rejection or

only in a cosmetic use of DLAs (Deserti & Rizzo, 2014). It is important to note that DLAs were most often reported to be in the periphery or separate from the organization, as interpreted according to Junginger's model of design integration (2009).

To summarize, the results indicate that DLAs are indeed perceived to support public sector organizations to work more collaboratively and across silos as well as to consider the end-user perspective in their work. DLAs are utilized in a wide range of ways with the most considerable emphasis on digital service development. However, respondents reported that DLAs are predominantly positioned in the periphery of the organizations. Respondents emphasized countless structural- and awareness-related challenges in the utilization of DLAs. Additionally, the more advanced application of design pertaining to strategy, policy and organizational transformation remain mostly limited according to the surveyed design-minded civil servants. These results point to the need for additional considerations on how design is positioned within the organization, and how awareness, structure, and cultural issues are addressed. This may be critical if DLAs are to deliver on promises related to their application to complex, strategic, and policy level problems. Lastly, it is likely that each public sector organization faces a specific mix of challenges depending on its context. It is also likely that each organization will have to find its own arrangement and strategies to best utilize DLAs. However, there may be an opportunity for relevant actors, such as Julkis-muotoilijat or Sitra, to play the role of facilitator or otherwise support organizational processes in first reflecting on their current application and challenges in applying DLAs.

The outcomes of this research bear significance for researchers who are interested in the application of design-led approaches in governments as well as practitioners working inside public sector organizations, especially in Finland. For researchers in the field, this work has shed a broad light on some of the current landscape of design-led approaches in Finland, revealing areas for further research outlined below. Additionally, practitioners of the Julkis-muotoilijat have been presented preliminary results of the survey. Based on the feedback received at this event, it became clear that the survey results have validated some of the practitioners' experiences. It also fueled a discussion in the community on actions needed to address some of the most pressing challenges that were identified. For organizations intending to reflect on their current design capability, the expanded Design Capability Framework (Malmberg, 2017) may be a relevant reference. The framework itself may enable a realization that organizational structures and awareness as well as resources are likely to influence the rate of success and impact of applying DLAs in the organization.

5.2 LIMITATIONS AND VALIDITY OF THE RESEARCH

All research has its limitations. In the case of this thesis, the limitations are mostly due to the chosen method (i.e., survey through a questionnaire), the particular context of the research, and the use of the Design Capability Framework (Malmberg, 2017). In the following section, I consider these parameters and their consequences for the validity of the research.

First, surveys generally capture the respondents' views only in the moment of filling out the survey (Muratovski, 2016), and respondents' views may change over time. Sometimes there is a risk of questions being misunderstood, and in the case of surveys, this cannot be corrected (Gillham, 2000). Additionally, the survey format does not encourage profound and lengthy answers. It is not possible to follow up with the respondents to clarify their position or to probe deeper into their answers. In this specific study, the

primary language of the survey was English, and respondents were asked to fill out the questionnaire in English. Consequently, the language barrier may have influenced the quality of the answers; however, the respondents were given the option to provide answers in Finnish to open-ended questions. The translation of Finnish answers may have also influenced the results. However, only a small number ($n=4$) of respondents opted to provide their replies in Finnish. Therefore, the effect of translation on the results should be negligible. All of the above listed factors may have influenced the quality and reliability of responses and consequently the derived findings.

Second, the survey was developed as part of a larger research effort, as outlined on page 40. This meant that I had limited influence on the survey design. As a result of this, the survey was not developed with the Design Capability Framework (Malmberg, 2017) in mind. Consequently, parts of the survey did not fit well into the framework. Additionally, the survey did not include potentially important questions related to certain aspects of the framework. Moreover, the Design Capability Framework (Malmberg, 2017) proved to be slightly unconsolidated and in its current form is perhaps better suited for a conceptual use rather than as an analytical tool. This resulted in a somewhat superficial application of the framework. The framework also conflates broader organizational conditions (such as resources and structures) with more individual qualities (such as the knowledge of design of an individual). This combination proved to be ungainly when the framework was applied as an analytical tool. However, utilizing this framework also had its benefits. It allowed for a structured and multi-dimensional reflection, considering different aspects needed for applying DLAs in the public sector. It has been successful in that it helped to structure the findings meaningfully and helped consider the three dimensions of design capability in Finnish governmental organizations. I would like to stress that access to data related to the application, use, and challenges of design-led approaches in the Finnish governmental context for a non-Finnish speaker proved to be highly challenging. Accessing relevant data through the channel of this larger research effort was a unique and rare opportunity, even if it brought limitations to the research outcome.

Third, the generalizability of the results is limited due to the small sample size, and the results cannot be considered statistically significant. Moreover, respondents were mostly self-selected and self-reporting, which may have brought bias into the research. Additionally, this thesis captured the views of design-minded civil servants, half of which had formal design training. The views this group holds are not representative of the views of other civil servants within the organizations in which they work. However, surveying this particular group provided a unique perspective of those working inside the government who are design-minded.

5.3 FURTHER RESEARCH

The outcomes of the study have opened up further areas for inquiry. However, more research is needed to increase the reliability and significance of the results and conduct a more in-depth exploration of significant insights that have started to emerge. First, there is an opportunity to learn from the outcomes of the first survey, revise and repeat it with a more representative and larger sample of design-minded civil servants. Additional and more design capability-related questions may be included, for example, about the design practices of the respondents. Additionally, a complementary qualitative study may be needed to further explore some of the findings, for example, the role and contribution of creativity and imagination in the governmental context.

Another area of inquiry may be to more closely examine Finnish organizations that are excelling in using DLAs, and where higher levels of application (i.e., strategy or policy) have been possible. Examining organizations and the conditions within which the application of DLAs has been successful may provide significant learning opportunities for organizations looking to make the most of DLAs. Organization-specific studies should also seek to include the views other than design-minded civil servants, across the spectrum of hierarchy.

The Design Capability Framework (Malmberg, 2017) served an important role in reflecting on the results of this research. However, a more rigorous and detailed development of the framework may be needed to increase its analytical utility for research purposes. Additionally, a closer examination on the nature of the relationship between the three dimensions and their elements may further increase its usefulness. The framework may also be further developed into a tool that may enable practical reflection within organizations about their use of DLAs. Such tools have already begun to appear (e.g., Yeo & Lee, 2018), though they rely on frameworks other than the Design Capability Framework (Malmberg, 2017).

This thesis did not examine the process through which individuals and their organizations acquire design capabilities. However, academic research on this important matter has already started to emerge. For example, S. G. Bailey (2012) examined what affects the uptake of service design in large UK public sector organizations. Malmberg and Wetter-Edman (2016) looked at the uptake of design approaches through a knowledge absorption perspective, while Holmlid and Malmberg (2018) employed a learning theory lens. Lima and Sangiorgi (2018) looked at the acquisition of design approaches through a knowledge transfer lens. Further studies looking into how governmental organizations learn new ways of approaching public problems, such as DLAs, may be a much-needed complementary area of research. While looking at the status of DLAs may help diagnose the current conditions, looking at how DLAs are developed in an organization may shed light on informing next steps of the organization.

This thesis took an explorative approach to the topic of DLAs in the government. However, the application of DLAs in this context is high-stakes, and not without its controversies (see page 18 for a brief overview). Potentially millions are affected by service provisions and policy decisions, which are areas where design-led approaches are increasingly part of. In addition to more explorative research, there is a pressing need for critically reflective research which examines, for example, the political aspect of this practice.

CONCLUSION

Design-led approaches have been increasingly applied in the Finnish public sector and around the world. This is evidenced by the appearance of in-house design units, the increased procurement of design services as well as training of civil servants working inside the government. Communities of practice comprised of design-minded civil servants, such as the *Julkis-muotoilijat* community in Finland, have formed around the application of DLAs in government. As explained on page 42, this thesis defined design-minded civil servants as individuals who have acquired some level of design competence and knowledge (whether through formal or informal means) and those who are practicing DLAs in their work.

Finland has been regarded as a forerunner in the application of DLAs (Bason & Schneider, 2014; McNabola et al., 2013). DLAs in the government are claimed to provide numerous benefits, such as reducing costs while improving public value as well as introducing a new way to approach complex problems. However, it is unclear which benefits of DLAs are most pronounced and valued in the public sector. Additionally, DLAs are appealing and relevant to the public sector partially because of their ability to assist governments as they address complex problems. However, design-led approaches do not just work when introduced to the public sector (Bason, 2014; Body, 2008; Deserti & Rizzo, 2014; Kimbell, 2015). Examining the challenges of applying DLAs may enable informed action and ultimately better utilization of DLAs. In this thesis, the Design Capability Framework (Malmberg, 2017) provided scaffolding to examine broader organizational conditions, such as structures and awareness in addition to the availability of design resources.

This thesis examined the views of design-minded civil servants with a membership in the *Julkis-muotoilijat* community. This group has a unique perspective in both the application and challenges associated with DLAs. Through surveying this group, this thesis has shed light on the current value, uses, and perceived potential contribution of design-led approaches by some design-minded civil servants. Additionally, challenges related to the application of design-led approaches were identified relating to all three dimensions of design capability, namely the awareness, design resources, and structures enabling design practice (Malmberg, 2017).

In the surveyed group, the results indicate that design-led approaches are still mostly positioned at the periphery of organizations. Most commonly,

DLAs were reported to be a part of the respondents' organizations and applied to limited areas and functions. Moreover, design competencies were most commonly expressed to reside in individuals across departments and external consultants. Respondents articulated a wide range of uses for DLAs within their organizations, ranging from aiding communication to supporting policy-related work. However, the most emphasized utilization of design-led approaches was in digital service development. More generally, DLAs were perceived to contribute by bringing user-centric views, building bridges, and enabling greater collaboration between actors. This appeared in both how individuals reflected in general about DLAs as well as how they reported on the use of DLAs in their organizations. Respondents recognized the potential for DLAs to contribute to transforming the way government works. However, respondents expressed that this aspect of DLAs is not necessarily actualized in their organization. There seemed to have been fewer mentions of the application of DLAs for strategy and policy-related work. Additionally, respondents heavily emphasized challenges related to a lack of awareness of design within their organization as well as numerous structural barriers to their work (e.g., lack of committed leadership and cultural resistance).

The application of design-led approaches varies significantly across organizations, and the challenges of applying DLAs are multifarious as the respondents of this research emphasized. In the future, more focused efforts may be required in examining and improving the organizational conditions which enable or present a barrier to the utilization of DLAs, if the promises of DLAs are to be materialized.

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Appendices

APPENDIX A: DESIGN DISCIPLINES AND TERMS

This appendix presents some of the most significant design disciplines and terms related to design in the public sector. I generated this list of design fields and terms based on the most mentioned disciplines in the reviewed literature focused on the application of DLAs in the public sector setting.

DESIGN FIELD/TERM	DESCRIPTION
Service design or designing for service	<p>Service design is a relatively new field that emerged in the 1990s, with the first service design studios forming around the early 2000s (Sangiorgi & Prendiville, 2014). In their introduction, Sangiorgi & Prendiville (2014) add that, initially, the discipline was most concerned with designing service experiences. Since its inception, it has been playing a more expansive role (Sangiorgi & Prendiville, 2014). They elaborate that designers now routinely engage with behind-the-counter organizational processes, as well as face larger questions surrounding organizational context, culture, and its transformation. In the context of the public sector, services are sometimes viewed as “instruments for policy implementation” and are increasingly recognized for their role in building trust and inclusion, and ultimately in questions of social justice (Junginger, 2012, p. 19).</p> <p>Design represents one disciplinary perspective on designing services (Kimbell, 2011a). There are numerous definitions of service design, as illustrated in <i>This is Service Design Thinking</i> (Stickdorn et al., 2011, p. 30-31). A particularly compelling definition describes it as an activity that “helps to innovate (create new) or improve (existing) services to make them more useful, usable, desirable for clients and efficient as well as effective for organizations” (Moritz, 2005; as cited in Stickdorn et al. 2011, p.31).</p>
Design for policy	<p>In the public sector context, policies are most commonly understood as the different “methods, levers and guidelines” which are used by governments to address public problems and achieve specific goals (Conliffe, Story, & Hsu, 2018, p. 6). However, as Shore and Wright (2011) observe, policies are complex and nebulous, and describe them as “windows onto political processes in which actors, agents, concepts and technologies interact in different sites, creating or consolidating new rationalities of governance and regimes of knowledge and power” (2011, p. 1). It has been acknowledged that the current ways of making policy are not well suited to 21st-century problems (Bailey J. & Lloyd, 2017). Design approaches may provide a set of useful complementary tools and methods (Bailey J. & Lloyd, 2017) to the policymaking practice.</p> <p>Design for policy is an emerging field, in which design methods, including co-design, are applied in the context of complex policy processes (Bason, 2014). In design for policy, citizens, along with partners, suppliers, and other stakeholders, are involved (Bason, 2014) in different policy stages such as policy-making and policy implementation. Examples of applying design in policy-making processes can be found in Kimbell’s report on the Policy Lab in the British government (Kimbell, 2015) as well as conference paper on the same topic (Kimbell, 2016).</p>

DESIGN FIELD/TERM	DESCRIPTION
Strategic design	<p>Researchers and practitioners alike often describe strategic design as a practice in which designers apply their skills at the macro level. In a more traditional design approach, designers are assigned a brief that focuses on meeting a narrower need. A strategic design practice, on the other hand, involves looking at bigger, systemic challenges (Boyer et al., 2011). Similarly, Calabretta, Gemser, and Karpen (2016) refer to strategic design as practice in which design skills and capabilities are used to inform strategic decisions within an organization. In their book, they define strategic decisions as those which have long-term effects on an organization, are multi-stakeholder, and that require a substantial commitment of resources (Calabretta et al. 2016). In strategic design, designers actively engage in defining the brief and framing of the problem (Calabretta et al., 2016; Meroni, 2008), and their work results in more “complete and resilient solutions” (Boyer et al., 2011, p. 329), which are often innovative (Calabretta et al., 2016).</p>
Design thinking	<p>Design thinking is divorced from any one particular discipline of design (Kimbell, 2011b). It is a general term that is often described as a “human centered approach to problem solving” (Kimbell, 2011b, p. 287). Design thinking features an iterative process that often involves visual artifacts and prototyping (Kimbell, 2011b). Kimbell posits that the term originates from research conducted in the design discipline; however, it has since been popularized in the fields of business management and consulting. For example, proponents such as IDEO’s Tim Brown and Roger Martin from Rotman School of Management in Toronto have both authored influential books on the subject of design thinking in business and organizations. In her thorough review and analysis, Kimbell identified three common ways in which design thinking has been described, namely as a “cognitive style, as a general theory of design, and as a resource for organizations” (Kimbell, 2011b, p. 285).</p>

APPENDIX B: DESIGN LADDERS

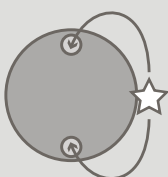
DESIGN COMMISSION (2013) MODEL

This model reproduced from the “Restarting Britain II” report by the Design Commission (2013, p 31) presents different organizational configuration of design in relation to public sector organizations. It emphasizes the position of design and professional designers relative to the institution, the scope of work that they undertake, and the roles of designers.



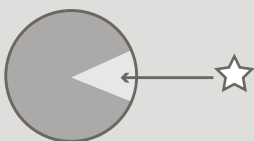
Embedded designer

Full time strategic-level employee responsible for developing organisational design capacity, as well as for specific service redesign programmes.
e.g. Cornwall Council, Capita, Helsinki Design Lab Exchange project, Scottish Government.



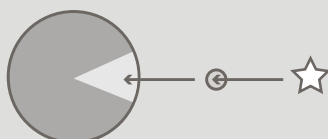
Internal agency

A service design unit (normally multi-disciplinary) works with other parts of the organisation on a project-by-project basis.
e.g. Social Innovation Lab Kent, MindLab, Behavioural Insights Team.



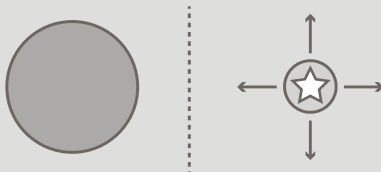
External agency

Consultancy from an independent design practice on a project-by-project basis.
e.g. Ideo, Snook, Uscreates, ThinkPublic, LiveWork, Engine, STBY – and many others.



Brokered intervention

Organisations such as the Design Council, or Nesta, in order to address a perceived market failure, broker design work for a public sector body, thereby introducing new expertise in a de-risked way, and supporting design businesses through procurement.
e.g. Patchwork, Creative Councils, Design Council Challenges and public service leadership projects.



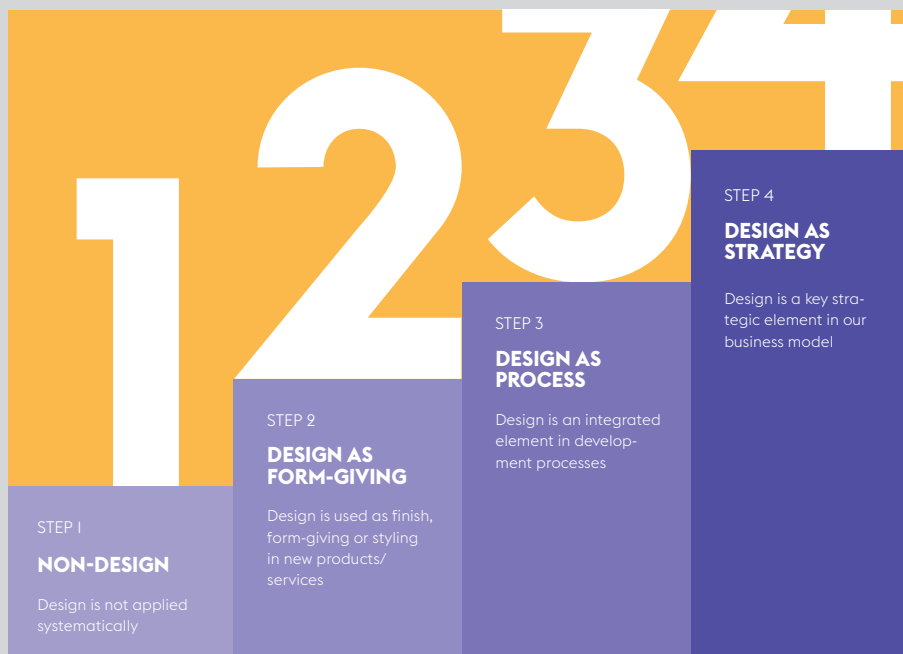
Design-led startup service

Design-led teams move outside of the traditional public service institutions to start services that meet a specific public need independently.
e.g. Participle, Good Gym, Care4Care.



No-designer design work

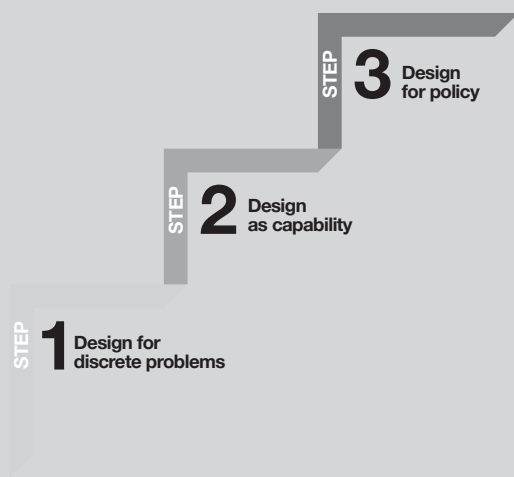
Public service managers deploy design methods without professional design input.



DANISH DESIGN LADDER ("THE DESIGN LADDER," 2015)

The Danish Design Ladder (2015) was developed primarily for assessing the current levels of design activity within private sector organizations of differing sizes (Ramlau & Melander, 2004) and has enjoyed massive popularity. It emphasizes mostly the perception and current use of design within the organization with some mention of disciplines involved in the process and who fulfills the role of the designer. It has been criticized for presenting a static model, providing little information about how an organization ought to move from one step to the other, and does not mention awareness or resources that are required for each step (Storvang et al., 2014).

The Public Sector Design Ladder



PUBLIC SECTOR DESIGN LADDER (MCNABOLA ET AL., 2013, P.8)

This model was developed with the public sector in mind and was intended to help public sector organizations to diagnose themselves (McNabola et al., 2013). It emphasizes who and where is doing the design work (i.e., outsourced or in-house personnel), who holds the design competence (i.e., professional designers or trained public sector employees) and if design is used for one-off projects, continuously within the organization, or by policymakers. The ladder conflates the location of design resources with the level of awareness of design and does not include reference to the structures that enable design practices. There is limited information on how the model has been developed.

Step 1: Design for discrete problems

At this step, design projects are one-offs and design thinking is not embedded in the commissioning organisations. Public sector service design projects, of which there are numerous good examples, fit into this category. Projects can be very small or have wide systemic implications. They can tackle societal problems such as malnutrition among the elderly, violence in hospitals and worklessness, among many others. This category also covers design's application as a way of making technology useful and usable for people.

Step 2: Design as capability

Here, public sector employees not only work with designers, they understand and use design thinking themselves. Many design techniques are easily transferable to non-designers and can create significant efficiencies as part of day-to-day operations. Staff:

- use the new skills to solve numerous problems too small to merit the hiring of designers.

- gain a shift in perspective in seeing things from the point of view of the citizens they serve.
- become more adept at hiring design teams when required.

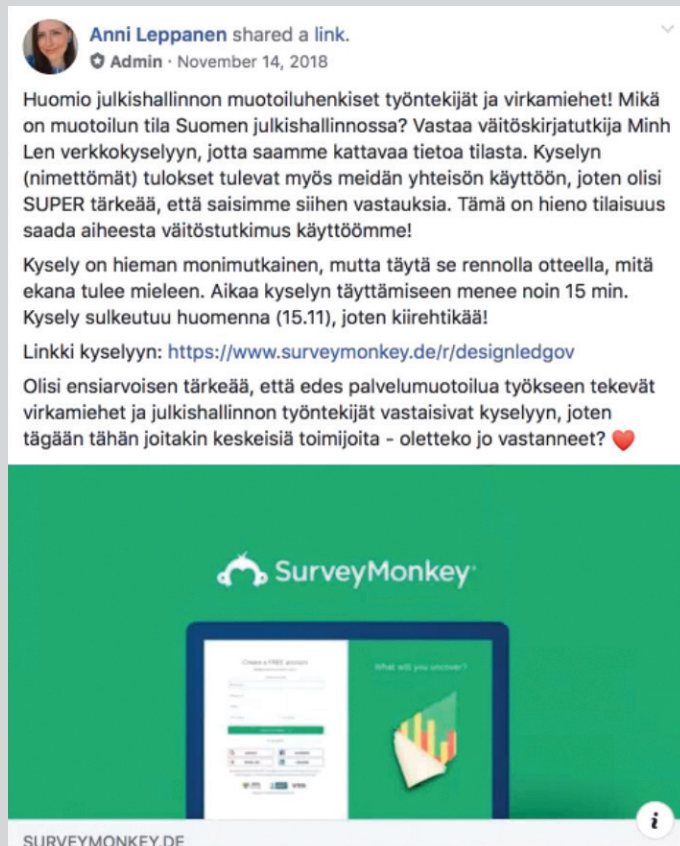
Step 3: Design for policy

Here design thinking is used by policymakers, often facilitated by designers. This is a relatively new discipline and much of the work on it so far has been experimental, but the logic of design's application here is strong given that it meets some key policymaker needs:

- A joined up process, from policymaking to implementation
- A low-cost way of mitigating risk through prototyping
- A way of getting an overview of a system
- A way of cutting across departmental silos and engaging people from outside government too.

[illegible]

APPENDIX D: PARTICIPANT INVITATION



Translation:

Attention all design-minded public sector workers and civil servants! What is the state of design within the Finnish public sector? Please answer this online survey by doctoral student Minh Le and help us gain comprehensive knowledge about the state of design. Anonymous answers will also be utilized in our community and having said that it is important that we get responses. This is a great opportunity for us to benefit from a doctoral dissertation!

The survey is bit complex, but fill it out casually — what thoughts first come to your mind. Answering the survey takes about 15 minutes. The survey will be closed tomorrow (15.11) therefore, please make sure to answer now!

Link to the survey: <https://www.surveymokey.de/r/designledgov>

It would be essential that at least civil servants and public sector workers practicing service design would answer. This is why I have tagged some key practitioners here — have you answered? <3

APPENDIX E: QUESTIONNAIRE

This survey is an inquiry into design-led approaches in the public sector. This ranges from service design, design thinking to participatory and various co-creation methods. “Design-led approaches (DLA)” can be observed at different levels and contexts throughout the public sector, however little is known about its efficacy, its challenges and its contexts of use. This survey aims to better understand the meanings, values, and relevance of design-led approaches in the Finnish public sector context – questions which the Julkis-muotoilijat network are best qualified to answer. Since this survey service estimates 12 minutes, I would set aside 15 minutes to complete the survey, since there are a few open ended questions. Responses (to open ended questions) can be written in English or Finnish.

Data collection will remain open until 30 November.

All identifying information (names, roles, organizational info) will be anonymized in the final research.

1. Which of the following statements best describes you?

- I am a public sector employee with informal training in design thinking and design-led approaches (I have taken career development courses and attended workshops/trainings)
- I am a public sector employee with formal training in design (from a degree granting institution)
- I am a public sector employee with some knowledge of design-led approaches gained through testing methods and applying it in my own work.
- I am a public sector employee who has learned of the value of design thinking and design-led approaches, but have not been successful in applying it.
- I am not a Finnish public sector employee

2. I work for

- the prime minister’s office
- state ministry
- government organization
- public sector agency, state-owned agency, or quasi-public sector organization
- sub-national level/municipal level organization
- I do not work for any of the above

3. Design-led approaches are more observable across governance settings today because...

4. Which of the following best represents the core benefit of using design-led approaches

- bring creativity and imagination to solve grand societal challenges

- build bridges across the bureaucratic and disciplinary silos
- to advocate for more inclusive / end-user views inside government
- to rethink and transform the way government works
- Other (please specify)

5. Where are the core competencies of design-led approaches found in your organization?

- mostly within select individuals across different departmental units
- within a specialized unit
- mostly purchased / outsourced to consultants
- a combination of individual skills/competencies and external consultants

6. Which of the following is most accurate?

- Design-led approaches are an external resource; design-led expertise is not a function in my organization
- Design-led approaches are a part of the organization; they are applied to specified and limited areas and functions.
- Design-led approaches are central to my organization’s efforts; and this expertise serves as a resource to various organizations
- Design-led approaches are integrated at the highest levels of my organization; it is integrated and applied actively into a wide range of service areas, administrative functions, and policy areas.
- Other (please specify)

7. In your own words, what is the core function of design-led approaches in your organization? In other words what core objectives does it help to fulfill?

8. Indicate your level of agreement with the following statements on the core values of design-led approaches (DLA) in a public sector setting

- At its core, DLA is about building bridges across the bureaucratic and disciplinary silos
- At its core, DLA is about taking the perspective of end-users/citizens/stakeholders
- At its core, DLA is about rethinking government processes, systems and structures
- At its core, DLA is about transforming the way government works
- At its core, DLA is about bringing imagination and creativity inside the bureaucracy to address society’s biggest challenges.

9. Please indicate your level of agreement with the following statements on the capacity of your organization to support design-led approaches.

- My organization has the ability to procure support staff with specialized design-related expertise
- My organization has the ability to attend relevant workshops and conferences relating to design-led approaches in government
- My organization has the ability to create (or customize) our own designerly models, tools, & techniques
- My organization intentionally discusses and reflects upon our design-led work in order to improve future efforts
- My organization has accumulated experiences with design-led approaches
- My organization has sufficient access to space (including rooms & equipment) required for design-led activities
- My organization has integrated design-led approaches into our strategic plan

10. Please indicate your level of agreement on the following statements on knowledge exchange / knowledge sharing of design-led approaches in the public sector.

- We share and present our work regularly to other public sector organizations
- We participate in related knowledge sharing networks
- We share and present our work regularly in international events and networks
- We have developed (or customized) toolkits and processes which can be easily replicated
- We actively share and exchange knowledge through our network of peers and experts
- We actively conduct research and publish on this topic
- We actively create opportunities for knowledge sharing and exchange

11. Imagine that you are speaking to a decision maker about getting the appropriate resources and funds to build stronger design capacity in your organization. What would your core argument be to justify this cost?

12. Choose 3 words/phrases which characterize design-led approaches, activities, or practices

13. In your own words, describe something you designed in your organization using a design-led approach.

14. In your experiences with design-led approaches, what has surprised you most about its use or effectiveness in public sector settings?

15. In your own words, what do you see as the major risk or pitfalls of introducing a design-led approach?

16. What kinds of resistance or reluctance to design-led approaches have you experienced?

- not seeing the benefit of taking a user-centered perspective
- ineffective communication; lack of understanding around design approaches more generally
- difficult to prove its value or cost-effectiveness
- Other (please specify)

17. Please indicate your level of agreement on the challenges with design-led approaches in your organization.

- general resistance and confusion around “design” meanings and values
- communicating its costs, benefits, and how to evaluate outcomes
- lack of leadership and authorizing environment
- there is a constant need to justify design-led approaches

18. Please indicate the level of agreement on the following statements on what is needed to improve the effectiveness of design-led approaches

- greater autonomy and support from leadership structures
- the ability and authority to initiate new collaborations and projects
- risk-free spaces to experiment, learn, and test new ideas, tools, methods
- dedicated working hours for sharing and knowledge exchange
- creation of an oversight body
- better evaluation tools and methods

For question 8, the scale provided was:
Completely disagree, Disagree, Agree, Completely agree

For questions 9, 10, 17, 18, the scale provided was:
Strongly disagree, Disagree, Agree, Strongly agree

APPENDIX F: DATA ANALYSIS SAMPLES

Please note that information regarding the organization of the respondent was redacted to protect their privacy.

<div>Question 7: "What is the core functions of DLA in your organisation? What core objectives does it help to fulfil..."</div> <div>File Edit View Insert Format Data Tools Add-ons Help</div> <div>Last edit was on February 14</div> <div>Share</div>												
Q7 What is the core functions of DLA in your organisation? What core objectives does it help to fulfil?												
	A	B	C	D	E	F	G	H	I	J	K	
1	Q7 What is the core functions of DLA in your organisation? What core objectives does it help to fulfil?											
2												
3		How / Where "What is the core functions of DLA in your organisation?"	Quest	Background	Org type	Question	Further comments	Why "What core objectives does it help to fulfil?"	Quest	Background	Org type	Question
4	Strategic level	DLA is not utilised in strategic level	#23	I am a public sector employee with internal training in design thinking and design-led approaches gained through testing methods and applying it in my own work.		the more strategic levels of design is still missing.	Unsure and contradictory among respondents: DLA is not utilised as a strategic element or the potential of it is recognised but not applied. What systems to enable this change? Defined now as "clear goals, clear roles and resources."	Strategic level DLA enables to see the future in more human and to solve wicked problems throughout the crowd sourcing	#5	I am a public sector employee with internal training in design thinking and design-led approaches gained through testing methods and applying it in my own work.		User roles and see the value of DLA in the service, it's still a challenge to
5		The potential of DLA is recognised in strategic level but it is not applied yet	#31	I am a public sector employee with internal training in design thinking and design-led approaches gained through testing methods and applying it in my own work.		It all sounds really nice on paper but due to lack of resources and clear goals, my role is quite strategic approach on design.			#15	I am a public sector employee with internal training in design thinking and design-led approaches gained through testing methods and applying it in my own work.		To design better products, experiments, and a certain substance
6			#2	I am a public sector employee with internal training in design thinking and design-led approaches gained through testing methods and applying it in my own work.		We have a incubator for ideas where they are co-created and tested with users. So the role is to integrate it to the strategic level.		DLA is used to create humane policies	#7	I am a public sector employee who has learned thinking and design-led approaches, but have not been successful in applying it.		efforts to create human
7												
8												
9												
10	Operative / tactical level	DLA is utilised on a strategic level	#24	I am a public sector employee with internal training in design thinking and design-led approaches (I have taken career development courses and attended workshops/trainings)		We have also used design-led approaches in thinking of new strategy but I hope that it will also be used in implementing the complex strategic projects.			#4	I am a public sector employee with internal training in design thinking and design-led approaches (I have taken career development courses and attended workshops/trainings)		Assisting in service that take service is more human-centred
11		DLA is currently being spread in the organization through teaching	#13	I am a public sector employee with internal training in design thinking and design-led approaches (I have taken career development courses and attended workshops/trainings)		Spreading understanding and practices of service design and customer-centric thinking.		The potential of DLA is recognised in organisational transformation but it is still not applied	#17	I am a public sector employee with internal training in design thinking and design-led approaches (I have taken career development courses and attended workshops/trainings)		In theory, they are organisational transformation
12			#14	I am a public sector employee with internal training in design thinking and design-led approaches (I have taken career development courses and attended workshops/trainings)		Design thinking is still in the process and perhaps the people would be more aware of the approach through one step at a time.		Benefits of DLA in organisational transformation	#25	I am a public sector employee with internal training in design thinking and design-led approaches (I have taken career development courses and attended workshops/trainings)		It helps people to think broad-minded.
13			#31	I am a public sector employee with internal training in design thinking and design-led approaches (I have taken career development courses and attended workshops/trainings)		I myself teach service design to our client organisations and work in bigger and smaller projects by to enhance understanding of the approach on different levels of the organisation.		DLA helps thinking differently	#25	I am a public sector employee with internal training in design thinking and design-led approaches (I have taken career development courses and attended workshops/trainings)		It helps people to think broad-minded.
14		Design-minded management supporting DLA	#9	I am a public sector employee with internal training in design thinking and design-led approaches (I have taken career development courses and attended workshops/trainings)		There is also an in-house design-minded development manager working on digitalisation of operational processes.			#4	I am a public sector employee with internal training in design thinking and design-led approaches (I have taken career development courses and attended workshops/trainings)		Assisting in service that take service is more human-centred
15		There is a growing interest towards designers	#6	I am a public sector employee with internal training in design thinking and design-led approaches (I have taken career development courses and attended workshops/trainings)		We recently hired one Service Designer and about 1 month there is a growing interest towards change during the years?						
Taulukko1												

